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engineering and environmental consultants

August 28, 2012

Mr. Mark Nations
The Doe Run Company
P.O. Box 1633
Desloge, Missouri 63601

Re: Ambient Air Monitoring Report – National Site

Dear Mr. Nations:

Please find attached the June 2012 “*Ambient Air Monitoring Report*” for The Doe Run Company at the National Industries, Inc. Reclamation Area Sites, located near Park Hills, Missouri.

This report will include the following:

- **Glossary of Terms** – Listing of the abbreviations used for each parameter and unit.
- **Ambient Air Quality Standards** – Lists the maximum allowable concentrations for the measured parameters.
- **TSP, Lead & PM₁₀ Particulate Summaries** – Includes the averages of each monitored parameter, which relates to the federal standards.
- **Particulate and Lead Analysis Spreadsheets**.
- **Lab Results (lead & cadmium)** – Lab reports from Inovatia Laboratories, LLC.
- **Meteorological Data Printouts** – This supplies printouts of each parameter.

Barr Engineering Company offers this report as an independent laboratory. This includes the weighing of filters, obtaining lead and cadmium analysis, compiling the data, and preparing the report. No interpretation of the data or analysis of the results is implied or intended. Should you have any questions regarding this report, please call.

Respectfully,

Richard J. Campbell, PE
Chemical Engineer
Senior Environmental Consultant

c: Kathy Rangen
Jason Gunter
Ty Morris
Kevin Lombardozzi

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Ambient Air Monitoring Report

***National Industries, Inc. Reclamation Area Site
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

June 2012



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SUPERFUND DIVISION

Ambient Air Monitoring Report

***National Industries, Inc. Reclamation Area Site
Park Hills, Missouri***

***Prepared for
The Doe Run Company***

June 2012



1001 Diamond Ridge Suite 1100

Jefferson City, MO 65109

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GLOSSARY OF TERMS

| | |
|--------------------------|---|
| $\mu\text{g}/\text{m}^3$ | Micrograms per Cubic Meter |
| mph | Miles per Hour |
| Wind Direction | Degrees from True North |
| TSP | Total Suspended Particulate |
| PM ₁₀ | Particulate Matter - 10 Microns or Less |
| mmHg | Millimeters of Mercury |

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

| | | | |
|---------------------------------------|-------------------------|-----------------|-------------------------------|
| PM ₁₀ – Particulate Matter | 24-Hour* | Annual Maximum | 150 $\mu\text{g}/\text{m}^3$ |
| Lead | Calendar Quarter | Arithmetic Mean | 1.5 $\mu\text{g}/\text{m}^3$ |
| Lead | Rolling 3-Month Average | Arithmetic Mean | 0.15 $\mu\text{g}/\text{m}^3$ |

TSP (Total Suspended Particulate) – There are no Federal Standards that apply solely for TSP.

*This standard must be exceeded more than once a year to constitute a violation.



TSP and Lead Concentration Summary

**National
Park Hills, Missouri**

2012

| Date | TSP Big River #4 ($\mu\text{g}/\text{m}^3$) | TSP Ozark #1 ($\mu\text{g}/\text{m}^3$) | TSP Soccer #2 ($\mu\text{g}/\text{m}^3$) | TSP Water Plant #3 ($\mu\text{g}/\text{m}^3$) | LEAD Big River #4 ($\mu\text{g}/\text{m}^3$) | LEAD Ozark #1 ($\mu\text{g}/\text{m}^3$) | LEAD Soccer #2 ($\mu\text{g}/\text{m}^3$) | LEAD Water Plant #3 ($\mu\text{g}/\text{m}^3$) |
|--------------------------------|---|---|--|---|---|--|---|--|
| 6/1/12 | 31 | 17 | 12 | 16 | 0.039 | 0.006 | 0.008 | 0.013 |
| 6/4/12 | 70 | 26 | 21 | 30 | 0.053 | 0.007 | 0.008 | 0.020 |
| 6/5/12 | 38 | 25 | 47 | 34 | 0.018 | 0.000 | 0.059 | 0.025 |
| 6/6/12 | 37 | 24 | 144 | 29 | 0.014 | 0.000 | 0.072 | 0.038 |
| 6/7/12 | 39 | 29 | 81 | 37 | 0.020 | 0.010 | 0.055 | 0.039 |
| 6/8/12 | 38 | 24 | 33 | 37 | 0.033 | 0.009 | 0.022 | 0.074 |
| 6/11/12 | 21 | 18 | 20 | 20 | 0.012 | 0.000 | 0.017 | 0.000 |
| 6/12/12 | 50 | 23 | 24 | 27 | 0.045 | 0.000 | 0.015 | 0.011 |
| 6/13/12 | 40 | 42 | 28 | 25 | 0.021 | 0.013 | 0.016 | 0.012 |
| 6/14/12 | 51 | 33 | 32 | 28 | 0.057 | 0.016 | 0.020 | 0.013 |
| 6/15/12 | 33 | 34 | 35 | 36 | 0.017 | 0.012 | 0.016 | 0.017 |
| 6/18/12 | 32 | 39 | 50 | 33 | 0.000 | 0.040 | 0.048 | 0.009 |
| 6/19/12 | 27 | 34 | 60 | 27 | 0.007 | 0.032 | 0.147 | 0.016 |
| 6/20/12 | 29 | 34 | 44 | 31 | 0.012 | 0.038 | 0.043 | 0.011 |
| 6/21/12 | 59 | 29 | 36 | 34 | 0.098 | 0.013 | 0.054 | 0.050 |
| 6/22/12 | 33 | 28 | 27 | 27 | 0.031 | 0.012 | 0.022 | 0.010 |
| 6/25/12 | 50 | 30 | 42 | 42 | 0.028 | 0.000 | 0.057 | 0.024 |
| 6/26/12 | 40 | 29 | 40 | 36 | 0.028 | 0.008 | 0.052 | 0.018 |
| 6/27/12 | 35 | 44 | 35 | 50 | 0.016 | 0.024 | 0.026 | 0.029 |
| 6/29/12 | 72 | 56 | 42 | 65 | 0.069 | 0.020 | 0.017 | 0.096 |
| Monthly Average | 41 | 31 | 43 | 33 | 0.031 | 0.013 | 0.039 | 0.026 |
| May 2012 | | | | | 0.024 | 0.016 | 0.034 | 0.029 |
| Apr 2012 | | | | | 0.016 | 0.009 | 0.017 | 0.016 |
| Rolling 3-month Average | | | | | 0.02 | 0.01 | 0.03 | 0.02 |
| | | | | | 3-month Average Lead NAAQS $\mu\text{g}/\text{m}^3$ | | | |
| | | | | | | | | 0.15 |

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.



Particulate Summary

National
Park Hills, Missouri

2012

| Date | PM ₁₀ Big River #4 ($\mu\text{g}/\text{m}^3$) | PM ₁₀ Ozark #1 ($\mu\text{g}/\text{m}^3$) | PM ₁₀ Soccer #2 ($\mu\text{g}/\text{m}^3$) | PM ₁₀ Water Plant #3 ($\mu\text{g}/\text{m}^3$) | PM ₁₀ NAAQS ($\mu\text{g}/\text{m}^3$) |
|-----------------|--|--|---|--|---|
| 2-Jun | 9 | 9 | 8 | 7 | 150 |
| 5-Jun | 16 | 11 | 12 | 14 | 150 |
| 8-Jun | 21 | 18 | 19 | 19 | 150 |
| 11-Jun | 18 | 11 | 13 | 14 | 150 |
| 14-Jun | 20 | 15 | 15 | 14 | 150 |
| 17-Jun | 14 | 11 | 11 | 11 | 150 |
| 20-Jun | 14 | 15 | 15 | 13 | 150 |
| 23-Jun | 18 | 14 | 15 | 15 | 150 |
| 26-Jun | 18 | 12 | 18 | 14 | 150 |
| 29-Jun | 33 | 34 | 28 | 36 | 150 |
| | | | | | |
| Monthly Average | 18 | 15 | 15 | 16 | |

Please see the particulate analysis sheets for explanations of missing or invalid data.

Note: A summary of the Big River #4 sampler data is also included, because it was part of the QA plan.

Particulate and Lead Analysis



TSP and Lead Analysis

The Doe Run Company

| Big River Site #4- Primary | | | | | | | | | | | | | | | | | | |
|---|--------------|--------------|---------------------|--------------------|----------------------|--------------------|---------------------------------------|---|-----------------------|--|--------------------------|---------------------------|-------|--|--|--|--|--|
| Sampler ID P4557 | | | | | | | | | | | | | | | | | | |
| Sample Date 2012 | Filter ID | TSP | | Lead | | Ratio P_f/P_s | Q _s m ³ /min | Q _{std} m ³ /min | Elapsed Time hr | Sample Volume V _{std} m ³ | Mass Concentrations | | | | | | | |
| | | Net Wt. g | Filter Wt. μg | Total Wt. μg | T _{av} C | | | | | | TSP μg/m ³ | Lead μg/m ³ | | | | | | |
| 6/1/2012 | 8540313 | 0.0557 | 68 | 14 | 742.6 | 34.8 | 0.953 | 1.228 | 1.245 | 23.68 | 1769 | 31 | 0.039 | | | | | |
| 6/4/2012 | 8540304 | 0.1208 | 91 | 24 | 739.7 | 36.1 | 0.951 | 1.245 | 1.213 | 23.69 | 1724 | 70 | 0.053 | | | | | |
| 6/5/2012 | 8593195 | 0.0652 | 32 | 21 | 741.9 | 35.7 | 0.952 | 1.240 | 1.225 | 23.59 | 1734 | 38 | 0.018 | | | | | |
| 6/6/2012 | 8593187 | 0.0652 | 25 | 19 | 744.4 | 35.4 | 0.952 | 1.236 | 1.236 | 23.68 | 1757 | 37 | 0.014 | | | | | |
| 6/7/2012 | 8593176 | 0.0679 | 35 | 19 | 746.3 | 35.4 | 0.953 | 1.237 | 1.239 | 23.68 | 1760 | 39 | 0.020 | | | | | |
| 6/8/2012 | 8593164 | 0.0655 | 57 | 22 | 745.2 | 35.8 | 0.952 | 1.240 | 1.230 | 23.51 | 1735 | 38 | 0.033 | | | | | |
| 6/11/2012 | 8593158 | 0.0360 | 20 | 21 | 742.4 | 35.7 | 0.952 | 1.240 | 1.225 | 23.66 | 1739 | 21 | 0.012 | | | | | |
| 6/12/2012 | 8593149 | 0.0869 | 79 | 22 | 746.0 | 35.7 | 0.952 | 1.240 | 1.231 | 23.67 | 1749 | 50 | 0.045 | | | | | |
| 6/13/2012 | 8593139 | 0.0696 | 37 | 20 | 746.1 | 35.5 | 0.952 | 1.238 | 1.236 | 23.66 | 1755 | 40 | 0.021 | | | | | |
| 6/14/2012 | 8593129 | 0.0885 | 99 | 22 | 744.8 | 35.9 | 0.952 | 1.242 | 1.227 | 23.72 | 1746 | 51 | 0.057 | | | | | |
| 6/15/2012 | 8593120 | 0.0579 | 30 | 25 | 744.7 | 36.1 | 0.951 | 1.246 | 1.221 | 23.65 | 1733 | 33 | 0.017 | | | | | |
| 6/18/2012 | 8593110 | 0.0541 | < 10 | 28 | 741.1 | 36.6 | 0.951 | 1.251 | 1.207 | 23.55 | 1705 | 32 | 0.000 | | | | | |
| 6/19/2012 | 8593101 | 0.0458 | 11 | 28 | 743.9 | 36.5 | 0.951 | 1.250 | 1.212 | 23.65 | 1720 | 27 | 0.007 | | | | | |
| 6/20/2012 | 8593492 | 0.0494 | 21 | 28 | 744.9 | 36.5 | 0.951 | 1.251 | 1.213 | 23.73 | 1728 | 29 | 0.012 | | | | | |
| 6/21/2012 | 8593483 | 0.1018 | 167 | 26 | 744.3 | 36.3 | 0.951 | 1.247 | 1.218 | 23.46 | 1715 | 59 | 0.098 | | | | | |
| 6/22/2012 | 8593476 | 0.0579 | 54 | 24 | 744.3 | 36.1 | 0.952 | 1.245 | 1.221 | 23.69 | 1736 | 33 | 0.031 | | | | | |
| 6/25/2012 | 8593464 | 0.0852 | 48 | 28 | 741.9 | 36.5 | 0.951 | 1.250 | 1.209 | 23.64 | 1714 | 50 | 0.028 | | | | | |
| 6/26/2012 | 8593454 | 0.0691 | 48 | 22 | 743.1 | 35.8 | 0.952 | 1.241 | 1.224 | 23.53 | 1728 | 40 | 0.028 | | | | | |
| 6/27/2012 | 8593446 | 0.0603 | 27 | 27 | 742.9 | 36.4 | 0.951 | 1.249 | 1.213 | 23.74 | 1728 | 35 | 0.016 | | | | | |
| 6/29/2012 | 8593437 | 0.1222 | 118 | 32 | 741.7 | 37.0 | 0.950 | 1.257 | 1.198 | 23.74 | 1707 | 72 | 0.069 | | | | | |
| Data Captured | | | TSP | Lead | | | | | | | | | | | | | | |
| Valid Samples: | 20 | 20 | | | | | | | | Monthly Average: | 41 | 0.031 | | | | | | |
| Scheduled Samples: | 20 | 20 | | | | | | | | Standard Deviation: | 14 | 0.024 | | | | | | |
| Percent Data Captured: | 100% | 100% | | | | | | | | Maximum: | 72 | 0.098 | | | | | | |
| | | | | | | | | | | Minimum: | 21 | 0.000 | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | |
| 6/28/2012 - Training - No samples scheduled | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | |
| T_{av} = average temperature in degrees Celcius P_{av} = average station pressure in millimeters of mercury $P_f = (((Temp \text{ in } ^\circ\text{K} * Temp \text{ Slope}) + Temp \text{ Int.}) * 1.868$ $P_f = ((Temp \text{ in } ^\circ\text{K} * 0.0664) + (-0.4213)) * 1.868$ $P_o/P_s = \text{pressure ratio of } P_f \text{ and } P_{av} = 1 - P_f/P_{av}$ | | | | | | | | | | | | | | | | | | |
| Q_s = look up table volumetric flow rate Q_{std} = total sample volumetric flow rate corrected to standard conditions V_{std} = total sample volume corrected to standard conditions TSP = mass concentration in $\mu\text{g}/\text{std m}^3$ Lead = mass concentration in $\mu\text{g}/\text{std m}^3$ | | | | | | | | | | | | | | | | | | |



TSP and Lead Analysis

The Doe Run Company

| National Site #1 Ozark Insulation | | | | | | | | | | | | | |
|--|-----------|--------------------|----------------|-----------------|-----------------|----------------|---|---------------------|---------------------|---------------------|--------------------------------|-------------------------|-------------------|
| Sampler ID | P2939 | | | | | | | | | | | | |
| Sample Date | Filter ID | TSP Filter Net Wt. | Lead Total Wt. | T _{av} | P _{av} | P _f | Ratio P _f /P _{av} | Q _a | Q _{std} | Elapsed Time | Sample Volume V _{std} | Mass Concentrations TSP | Lead |
| 2012 | g | µg | µg | C | mmHg | mmHg | | m ³ /min | m ³ /min | hr | m ³ | µg/m ³ | µg/m ³ |
| 6/1/2012 | 8540308 | 0.0302 | 11 | 14 | 742.6 | 34.8 | 0.953 | 1.224 | 1.241 | 23.69 | 1764 | 17 | 0.006 |
| 6/4/2012 | 8593199 | 0.0443 | 13 | 24 | 739.7 | 36.1 | 0.951 | 1.241 | 1.209 | 23.68 | 1718 | 26 | 0.007 |
| 6/5/2012 | 8593190 | 0.0438 | < 10 | 21 | 741.9 | 35.7 | 0.952 | 1.236 | 1.221 | 23.70 | 1736 | 25 | 0.000 |
| 6/6/2012 | 8593188 | 0.0428 | < 10 | 19 | 744.4 | 35.4 | 0.952 | 1.232 | 1.232 | 23.73 | 1754 | 24 | 0.000 |
| 6/7/2012 | 8593171 | 0.0511 | 17 | 19 | 746.3 | 35.4 | 0.953 | 1.232 | 1.234 | 23.73 | 1757 | 29 | 0.010 |
| 6/8/2012 | 8593163 | 0.0415 | 16 | 22 | 745.2 | 35.8 | 0.952 | 1.236 | 1.226 | 23.79 | 1749 | 24 | 0.009 |
| 6/11/2012 | 8593160 | 0.0309 | < 10 | 21 | 742.4 | 35.7 | 0.952 | 1.236 | 1.221 | 23.68 | 1735 | 18 | 0.000 |
| 6/12/2012 | 8593150 | 0.0405 | < 10 | 22 | 746.0 | 35.7 | 0.952 | 1.236 | 1.227 | 23.70 | 1745 | 23 | 0.000 |
| 6/13/2012 | 8593134 | 0.0729 | 22 | 20 | 746.1 | 35.5 | 0.952 | 1.234 | 1.232 | 23.67 | 1750 | 42 | 0.013 |
| 6/14/2012 | 8593124 | 0.0563 | 28 | 22 | 744.8 | 35.9 | 0.952 | 1.238 | 1.223 | 23.44 | 1720 | 33 | 0.016 |
| 6/15/2012 | 8593115 | 0.0580 | 20 | 25 | 744.7 | 36.1 | 0.951 | 1.242 | 1.217 | 23.56 | 1721 | 34 | 0.012 |
| 6/18/2012 | 8593105 | 0.0668 | 68 | 28 | 741.1 | 36.6 | 0.951 | 1.247 | 1.203 | 23.61 | 1704 | 39 | 0.040 |
| 6/19/2012 | 8593496 | 0.0593 | 55 | 28 | 743.9 | 36.5 | 0.951 | 1.246 | 1.208 | 23.70 | 1718 | 34 | 0.032 |
| 6/20/2012 | 8593487 | 0.0584 | 66 | 28 | 744.9 | 36.5 | 0.951 | 1.247 | 1.209 | 23.68 | 1718 | 34 | 0.038 |
| 6/21/2012 | 8593485 | 0.0500 | 22 | 26 | 744.3 | 36.3 | 0.951 | 1.243 | 1.214 | 23.62 | 1721 | 29 | 0.013 |
| 6/22/2012 | 8593469 | 0.0478 | 21 | 24 | 744.3 | 36.1 | 0.952 | 1.241 | 1.218 | 23.61 | 1725 | 28 | 0.012 |
| 6/25/2012 | 8593466 | 0.0522 | < 10 | 28 | 741.9 | 36.5 | 0.951 | 1.246 | 1.205 | 23.69 | 1712 | 30 | 0.000 |
| 6/26/2012 | 8593449 | 0.0499 | 14 | 22 | 743.1 | 35.8 | 0.952 | 1.237 | 1.220 | 23.69 | 1734 | 29 | 0.008 |
| 6/27/2012 | 8593447 | 0.0764 | 42 | 27 | 742.9 | 36.4 | 0.951 | 1.245 | 1.210 | 23.73 | 1722 | 44 | 0.024 |
| 6/29/2012 | 8593438 | 0.0950 | 33 | 32 | 741.7 | 37.0 | 0.950 | 1.253 | 1.195 | 23.66 | 1696 | 56 | 0.020 |
| Data Captured | | | TSP | Lead | | | | | | | | | |
| Valid Samples: | | | 20 | 20 | | | | | | | | | |
| Scheduled Samples: | | | 20 | 20 | | | | | | | | | |
| Percent Data Captured: | | | 100% | 100% | | | | | | | | | |
| | | | | | | | | | | Monthly Average: | 31 | 0.013 | |
| | | | | | | | | | | Standard Deviation: | 9 | 0.012 | |
| | | | | | | | | | | Maximum: | 56 | 0.040 | |
| | | | | | | | | | | Minimum: | 17 | 0.000 | |
| NOTES | | | | | | | | | | | | | |
| 6/28/2012 - Training - No samples scheduled | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | |
| T _{av} = average temperature in degrees Celcius | | | | | | | Q _a = look up table volumetric flow rate | | | | | | |
| P _{av} = average station pressure in millimeters of mercury | | | | | | | Q _{std} = total sample volumetric flow rate corrected to standard conditions | | | | | | |
| P _f = (((Temp in °Kelvin * Temp Slope))+Temp Int.))*1.868 | | | | | | | V _{std} = total sample volume corrected to standard conditions | | | | | | |
| P _f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | | | | TSP = mass concentration in µg/std m ³ | | | | | | |
| P _f /P _{av} = pressure ratio of P _f and P _{av} = 1 - P _f /P _{av} | | | | | | | Lead = mass concentration in µg/std m ³ | | | | | | |



TSP and Lead Analysis

The Doe Run Company

| Sampler ID P4474 | | | | | | | | | | National Site #2 - Soccer Field | | | | | | | | | |
|---|--------------|---------------------|---------------------------------------|---------------|------------------|---------------|--|----------------------------------|--------------------------------------|---------------------------------|---|--|----------------------------------|----------|----|-------|--|--|--|
| Sample Date 2012 | Filter ID | TSP Net Wt. g | Lead Total Wt. μg | T_{av} C | P_{av} mmHg | P_f mmHg | Ratio P_f/P_s | Q_s m^3/min | Q_{std} m^3/min | Elapsed Time hr | Sample Volume V_{std} m^3 | Mass Concentrations TSP $\mu\text{g}/\text{m}^3$ | Lead $\mu\text{g}/\text{m}^3$ | | | | | | |
| 6/1/2012 | 8540309 | 0.0215 | 13 | 14 | 742.6 | 34.8 | 0.953 | 1.210 | 1.226 | 23.47 | 1727 | 12 | 0.008 | | | | | | |
| 6/4/2012 | 8593200 | 0.0351 | 14 | 24 | 739.7 | 36.1 | 0.951 | 1.227 | 1.195 | 23.39 | 1678 | 21 | 0.008 | | | | | | |
| 6/5/2012 | 8593191 | 0.0806 | 101 | 21 | 741.9 | 35.7 | 0.952 | 1.222 | 1.207 | 23.50 | 1702 | 47 | 0.059 | | | | | | |
| 6/6/2012 | 8593189 | 0.2474 | 124 | 19 | 744.4 | 35.4 | 0.952 | 1.217 | 1.218 | 23.52 | 1719 | 144 | 0.072 | | | | | | |
| 6/7/2012 | 8593172 | 0.1395 | 95 | 19 | 746.3 | 35.4 | 0.953 | 1.218 | 1.220 | 23.50 | 1720 | 81 | 0.055 | | | | | | |
| 6/8/2012 | 8593162 | 0.0566 | 37 | 22 | 745.2 | 35.8 | 0.952 | 1.223 | 1.212 | 23.51 | 1710 | 33 | 0.022 | | | | | | |
| 6/11/2012 | 8593161 | 0.0332 | 29 | 21 | 742.4 | 35.7 | 0.952 | 1.222 | 1.208 | 23.41 | 1696 | 20 | 0.017 | | | | | | |
| 6/12/2012 | 8593151 | 0.0421 | 25 | 22 | 746.0 | 35.7 | 0.952 | 1.223 | 1.214 | 23.61 | 1719 | 24 | 0.015 | | | | | | |
| 6/13/2012 | 8593135 | 0.0488 | 27 | 20 | 746.1 | 35.5 | 0.952 | 1.219 | 1.218 | 23.56 | 1722 | 28 | 0.016 | | | | | | |
| 6/14/2012 | 8593125 | 0.0544 | 34 | 22 | 744.8 | 35.9 | 0.952 | 1.224 | 1.209 | 23.40 | 1698 | 32 | 0.020 | | | | | | |
| 6/15/2012 | 8593116 | 0.0603 | 27 | 25 | 744.7 | 36.1 | 0.951 | 1.227 | 1.203 | 23.54 | 1700 | 35 | 0.016 | | | | | | |
| 6/18/2012 | 8593106 | 0.0835 | 80 | 28 | 741.1 | 36.6 | 0.951 | 1.232 | 1.189 | 23.59 | 1683 | 50 | 0.048 | | | | | | |
| 6/19/2012 | 8593497 | 0.1005 | 247 | 28 | 743.9 | 36.5 | 0.951 | 1.232 | 1.194 | 23.52 | 1686 | 60 | 0.147 | | | | | | |
| 6/20/2012 | 8593488 | 0.0741 | 72 | 28 | 744.9 | 36.5 | 0.951 | 1.232 | 1.195 | 23.69 | 1699 | 44 | 0.043 | | | | | | |
| 6/21/2012 | 8593486 | 0.0611 | 91 | 26 | 744.3 | 36.3 | 0.951 | 1.229 | 1.200 | 23.47 | 1690 | 36 | 0.054 | | | | | | |
| 6/22/2012 | 8593468 | 0.0465 | 38 | 24 | 744.3 | 36.1 | 0.952 | 1.227 | 1.204 | 23.59 | 1704 | 27 | 0.022 | | | | | | |
| 6/25/2012 | 8593467 | 0.0698 | 96 | 28 | 741.9 | 36.5 | 0.951 | 1.232 | 1.191 | 23.41 | 1673 | 42 | 0.057 | | | | | | |
| 6/26/2012 | 8593450 | 0.0675 | 89 | 22 | 743.1 | 35.8 | 0.952 | 1.224 | 1.207 | 23.58 | 1707 | 40 | 0.052 | | | | | | |
| 6/27/2012 | 8593448 | 0.0603 | 44 | 27 | 742.9 | 36.4 | 0.951 | 1.230 | 1.196 | 23.91 | 1715 | 35 | 0.026 | | | | | | |
| 6/29/2012 | 8593439 | 0.0712 | 29 | 32 | 741.7 | 37.0 | 0.950 | 1.239 | 1.181 | 23.82 | 1688 | 42 | 0.017 | | | | | | |
| Data Captured | | | TSP | Lead | | | | | | | | | | | | | | | |
| Valid Samples: | 20 | 20 | | | | | | | | | | Monthly Average: | 43 | 0.039 | | | | | |
| Scheduled Samples: | 20 | 20 | | | | | | | | | | Standard Deviation: | 28 | 0.032 | | | | | |
| Percent Data Captured: | 100% | 100% | | | | | | | | | | Maximum: | 144 | 0.147 | | | | | |
| | | | | | | | | | | | | | | Minimum: | 12 | 0.008 | | | |
| NOTES | | | | | | | | | | | | | | | | | | | |
| 6/28/2012 - Training - No samples scheduled | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | |
| T_{av} = average temperature in degrees Celcius | | | | | | | Q_s = look up table volumetric flow rate | | | | | | | | | | | | |
| P_{av} = average station pressure in millimeters of mercury | | | | | | | Q_{std} = total sample volumetric flow rate corrected to standard conditions | | | | | | | | | | | | |
| P_t = (((Temp in °Kelvin * Temp Slope)+Temp Int.)*1.868 | | | | | | | V_{std} = total sample volume corrected to standard conditions | | | | | | | | | | | | |
| P_f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | | | | TSP = mass concentration in $\mu\text{g}/\text{std m}^3$ | | | | | | | | | | | | |
| P_f/P_s = pressure ratio of P_f and P_{av} = $1 - P_f/P_{av}$ | | | | | | | Lead = mass concentration in $\mu\text{g}/\text{std m}^3$ | | | | | | | | | | | | |



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P4475

National Site Water Plant #3

| Sample Date 2012 | Filter ID | TSP | | Lead | | Ratio P_f/P_a | Q _a m ³ /min | Q _{std} m ³ /min | Elapsed Time hr | Sample | | Mass Concentrations TSP μg/m ³ | Lead μg/m ³ |
|---------------------|--------------|------------------------|--------------------|----------------------|-------------------------|--------------------|---------------------------------------|---|-----------------------|------------------------------------|---------------------|---|---------------------------|
| | | Filter Net Wt. g | Total Wt. μg | T _{av} C | P _{av} mmHg | | | | | V _{std} m ³ | m ³ /min | | |
| 6/1/2012 | 8540311 | 0.0283 | 22 | 14 | 742.6 | 34.8 | 0.953 | 1.214 | 1.231 | 23.76 | 1755 | 16 | 0.013 |
| 6/4/2012 | 8540302 | 0.0522 | 35 | 24 | 739.7 | 36.1 | 0.951 | 1.231 | 1.200 | 23.80 | 1713 | 30 | 0.020 |
| 6/5/2012 | 8593193 | 0.0579 | 43 | 21 | 741.9 | 35.7 | 0.952 | 1.227 | 1.212 | 23.71 | 1724 | 34 | 0.025 |
| 6/6/2012 | 8593185 | 0.0499 | 66 | 19 | 744.4 | 35.4 | 0.952 | 1.222 | 1.223 | 23.71 | 1740 | 29 | 0.038 |
| 6/7/2012 | 8593174 | 0.0640 | 68 | 19 | 746.3 | 35.4 | 0.953 | 1.223 | 1.225 | 23.81 | 1750 | 37 | 0.039 |
| 6/8/2012 | 8593166 | 0.0648 | 128 | 22 | 745.2 | 35.8 | 0.952 | 1.227 | 1.217 | 23.73 | 1732 | 37 | 0.074 |
| 6/11/2012 | 8593156 | 0.0353 | < 10 | 21 | 742.4 | 35.7 | 0.952 | 1.227 | 1.212 | 23.81 | 1732 | 20 | 0.000 |
| 6/12/2012 | 8593147 | 0.0475 | 19 | 22 | 746.0 | 35.7 | 0.952 | 1.227 | 1.218 | 23.66 | 1729 | 27 | 0.011 |
| 6/13/2012 | 8593137 | 0.0441 | 21 | 20 | 746.1 | 35.5 | 0.952 | 1.224 | 1.223 | 23.62 | 1733 | 25 | 0.012 |
| 6/14/2012 | 8593127 | 0.0487 | 23 | 22 | 744.8 | 35.9 | 0.952 | 1.229 | 1.214 | 23.81 | 1734 | 28 | 0.013 |
| 6/15/2012 | 8593118 | 0.0627 | 29 | 25 | 744.7 | 36.1 | 0.951 | 1.232 | 1.208 | 23.73 | 1720 | 36 | 0.017 |
| 6/18/2012 | 8593108 | 0.0555 | 15 | 28 | 741.1 | 36.6 | 0.951 | 1.237 | 1.194 | 23.58 | 1689 | 33 | 0.009 |
| 6/19/2012 | 8593499 | 0.0469 | 27 | 28 | 743.9 | 36.5 | 0.951 | 1.237 | 1.199 | 23.81 | 1713 | 27 | 0.016 |
| 6/20/2012 | 8593490 | 0.0523 | 18 | 28 | 744.9 | 36.5 | 0.951 | 1.237 | 1.200 | 23.75 | 1710 | 31 | 0.011 |
| 6/21/2012 | 8593481 | 0.0586 | 85 | 26 | 744.3 | 36.3 | 0.951 | 1.233 | 1.205 | 23.77 | 1718 | 34 | 0.050 |
| 6/22/2012 | 8593471 | 0.0463 | 18 | 24 | 744.3 | 36.1 | 0.952 | 1.231 | 1.208 | 23.76 | 1722 | 27 | 0.010 |
| 6/25/2012 | 8593462 | 0.0716 | 41 | 28 | 741.9 | 36.5 | 0.951 | 1.237 | 1.196 | 23.79 | 1706 | 42 | 0.024 |
| 6/26/2012 | 8593452 | 0.0608 | 30 | 22 | 743.1 | 35.8 | 0.952 | 1.228 | 1.211 | 23.51 | 1708 | 36 | 0.018 |
| 6/27/2012 | 8593444 | 0.0847 | 50 | 27 | 742.9 | 36.4 | 0.951 | 1.235 | 1.200 | 23.71 | 1707 | 50 | 0.029 |
| 6/29/2012 | 8593435 | 0.1092 | 161 | 32 | 741.7 | 37.0 | 0.950 | 1.243 | 1.185 | 23.74 | 1688 | 65 | 0.096 |

| Data Captured | TSP | Lead |
|------------------------|------|------|
| Valid Samples: | 20 | 20 |
| Scheduled Samples: | 20 | 20 |
| Percent Data Captured: | 100% | 100% |

| | | |
|---------------------|----|-------|
| Monthly Average: | 33 | 0.026 |
| Standard Deviation: | 10 | 0.024 |
| Maximum: | 65 | 0.096 |
| Minimum: | 16 | 0.000 |

NOTES

6/28/2012 - Training - No samples scheduled

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celcius

P_{av} = average station pressure in millimeters of mercury

$P_f = ((Temp \text{ in } ^\circ\text{K} * Temp \text{ Slope}) + Temp \text{ Int.}) * 1.868$

$P_f = ((Temp \text{ in } ^\circ\text{K} * 0.0664) + (-0.4213)) * 1.868$

$P_f/P_a = \text{pressure ratio of } P_f \text{ and } P_{av} = 1 - P_f/P_{av}$

Q_a = look up table volumetric flow rate

Q_{std} = total sample volumetric flow rate corrected to standard conditions

V_{std} = total sample volume corrected to standard conditions

TSP = mass concentration in $\mu\text{g}/\text{std m}^3$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



TSP and Lead Analysis

The Doe Run Company

SAMPLER ID P6609

Big River Site #4 - QA

| Sample Date 2012 | Filter ID | TSP Filter Net Wt. g | Lead Total Wt. μg | Sample | | | | | | | | | |
|---------------------|--------------|-------------------------------|---------------------------------------|---------------|------------------|---------------|-----------------------|----------------------------------|--------------------------------------|-----------------------|-------------------------------------|--|----------------------------------|
| | | | | T_{av} C | P_{av} mmHg | P_f mmHg | Ratio P_f/P_{av} | Q_a m^3/min | Q_{std} m^3/min | Elapsed Time hr | Volume V_{std} m^3 | Mass Concentrations TSP $\mu\text{g}/\text{m}^3$ | Lead $\mu\text{g}/\text{m}^3$ |
| 6/5/2012 | 8540314 | 0.0690 | 31 | 21 | 741.9 | 35.7 | 0.952 | 1.231 | 1.217 | 23.59 | 1722 | 40 | 0.018 |
| 6/7/2012 | 8593177 | 0.2185 | 153 | 19 | 746.3 | 35.4 | 0.953 | 1.228 | 1.230 | 96.10 | 7091 | INVALID | INVALID |
| 6/12/2012 | 8593159 | 0.0885 | 76 | 22 | 746.0 | 35.7 | 0.952 | 1.232 | 1.223 | 23.65 | 1735 | 51 | 0.044 |
| 6/14/2012 | 8593130 | 0.0943 | 106 | 22 | 744.8 | 35.9 | 0.952 | 1.234 | 1.219 | 23.61 | 1726 | 55 | 0.062 |
| 6/19/2012 | 8593111 | 0.0468 | 14 | 28 | 743.9 | 36.5 | 0.951 | 1.242 | 1.204 | 23.55 | 1701 | 28 | 0.008 |
| 6/21/2012 | 8593484 | 0.1080 | 153 | 26 | 744.3 | 36.3 | 0.951 | 1.238 | 1.209 | 23.58 | 1711 | 63 | 0.089 |
| 6/26/2012 | 8593465 | 0.0670 | 54 | 22 | 743.1 | 35.8 | 0.952 | 1.233 | 1.216 | 23.84 | 1739 | 39 | 0.031 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| | | |
|------------------------|-----|-----|
| Valid Samples: | 6 | 6 |
| Scheduled Samples: | 7 | 7 |
| Percent Data Captured: | 86% | 86% |

| | | |
|---------------------|----|-------|
| Monthly Average: | 46 | 0.042 |
| Standard Deviation: | 13 | 0.030 |
| Maximum: | 63 | 0.089 |
| Minimum: | 28 | 0.008 |

NOTES

6/7/2012 - INVALID - Mechanical Failure - Timer Failed

DEFINITIONS and CALCULATIONS

T_{av} = average temperature in degrees Celsius

Q_a = look up table volumetric flow rate

P_{av} = average station pressure in millimeters of mercury

Q_{std} = total sample volumetric flow rate corrected to standard conditions

P_f = $((\text{Temp in } ^\circ\text{Kelvin} * \text{Temp Slope}) + \text{Temp Int.}) * 1.868$

V_{std} = total sample volume corrected to standard conditions

P_f = $((\text{Temp in } ^\circ\text{Kelvin} * 0.0664) + (-0.4213)) * 1.868$

TSP = mass concentration in $\mu\text{g}/\text{std m}^3$

P_f/P_{av} = pressure ratio of P_f and P_{av} = $1 - P_f/P_{av}$

Lead = mass concentration in $\mu\text{g}/\text{std m}^3$



PM₁₀ Analysis

The Doe Run Company

| SAMPLER ID P2952 | | | | | | | | Big River Site #4- Primary | | | | | | | | | | | |
|---|-----------|---------------------|-----------------|---|----------------|--------------------------------------|---------------------|----------------------------|--------------|--------------------------------|---|--|--|--|--|--|--|--|--|
| Sample Date | Filter ID | PM10 Filter Net Wt. | T _{av} | P _{av} | P _f | Ratio P _o /P _a | Q _a | Q _{std} | Elapsed Time | Sample Volume V _{std} | Mass Conc. PM ₁₀ μg/m ³ | | | | | | | | |
| 2012 | ID | g | C | mmHg | mmHg | | m ³ /min | m ³ /min | hr | m ³ | | | | | | | | | |
| 6/2/2012 | 262243 | 0.0141 | 17 | 742.1 | 35.1 | 0.953 | 1.138 | 1.143 | 23.73 | 1627 | 9 | | | | | | | | |
| 6/5/2012 | 262234 | 0.0264 | 21 | 741.9 | 35.7 | 0.952 | 1.145 | 1.131 | 23.64 | 1605 | 16 | | | | | | | | |
| 6/8/2012 | 262224 | 0.0332 | 22 | 745.2 | 35.8 | 0.952 | 1.146 | 1.136 | 23.73 | 1618 | 21 | | | | | | | | |
| 6/11/2012 | 262214 | 0.0293 | 21 | 742.4 | 35.7 | 0.952 | 1.146 | 1.132 | 23.66 | 1607 | 18 | | | | | | | | |
| 6/14/2012 | 262205 | 0.0323 | 22 | 744.8 | 35.9 | 0.952 | 1.147 | 1.133 | 23.69 | 1611 | 20 | | | | | | | | |
| 6/17/2012 | 262895 | 0.0221 | 26 | 742.8 | 36.3 | 0.951 | 1.152 | 1.122 | 23.67 | 1593 | 14 | | | | | | | | |
| 6/20/2012 | 262886 | 0.0229 | 28 | 744.9 | 36.5 | 0.951 | 1.156 | 1.121 | 23.65 | 1591 | 14 | | | | | | | | |
| 6/23/2012 | 262874 | 0.0287 | 24 | 743.9 | 36.1 | 0.951 | 1.150 | 1.127 | 23.70 | 1603 | 18 | | | | | | | | |
| 6/26/2012 | 262866 | 0.0287 | 22 | 743.1 | 35.8 | 0.952 | 1.147 | 1.131 | 23.63 | 1604 | 18 | | | | | | | | |
| 6/29/2012 | 262856 | 0.0529 | 32 | 741.7 | 37.0 | 0.950 | 1.162 | 1.107 | 24.01 | 1595 | 33 | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | |
| Valid Samples: 10 Scheduled Samples: 10 Percent Data Captured: 100% | | | | Monthly Average: 18 Standard Deviation: 6 Maximum: 33 Minimum: 9 | | | | | | | | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | |
| <hr/> | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | |
| T _{av} = average temperature in degrees Celcius P _{av} = average station pressure in millimeters of mercury P _f = ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868 P _f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | | | | | | | | | | | | | | | | |
| P _o /P _a = pressure ratio of P _f and P _{av} = 1 - Pf/P _{av} Q _a = look up table volumetric flow rate Q _{std} = sample volumetric flow rate corrected to standard conditions V _{std} = sample volume corrected to standard conditions | | | | | | | | | | | | | | | | | | | |



PM₁₀ Analysis

The Doe Run Company

| SAMPLER ID P2950 | | | | | | | | | | National Site #1 Ozark Insulation | | | | | | | | | | | |
|---|--------------|--------------------------------|---|---|------|--------------------------------|---------------------|---------------------|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Sample Date 2012 | Filter ID | PM10 Filter Net Wt. g | T _{av} P _{av} P _f Ratio Q _a Q _{std} | | | | | | Elapsed Time hr | Sample Volume V _{std} m ³ | Mass Conc. PM ₁₀ μg/m ³ | | | | | | | | | | |
| | | | C | mmHg | mmHg | P _o /P _a | m ³ /min | m ³ /min | | | | | | | | | | | | | |
| 6/2/2012 | 262248 | 0.0148 | 17 | 742.1 | 35.1 | 0.953 | 1.136 | 1.140 | 23.69 | 1621 | 9 | | | | | | | | | | |
| 6/5/2012 | 262239 | 0.0181 | 21 | 741.9 | 35.7 | 0.952 | 1.143 | 1.129 | 23.77 | 1610 | 11 | | | | | | | | | | |
| 6/8/2012 | 262222 | 0.0293 | 22 | 745.2 | 35.8 | 0.952 | 1.143 | 1.134 | 23.67 | 1610 | 18 | | | | | | | | | | |
| 6/11/2012 | 262212 | 0.0176 | 21 | 742.4 | 35.7 | 0.952 | 1.143 | 1.129 | 23.78 | 1611 | 11 | | | | | | | | | | |
| 6/14/2012 | 262210 | 0.0240 | 22 | 744.8 | 35.9 | 0.952 | 1.145 | 1.131 | 23.69 | 1608 | 15 | | | | | | | | | | |
| 6/17/2012 | 262900 | 0.0169 | 26 | 742.8 | 36.3 | 0.951 | 1.150 | 1.120 | 23.72 | 1594 | 11 | | | | | | | | | | |
| 6/20/2012 | 262891 | 0.0233 | 28 | 744.9 | 36.5 | 0.951 | 1.153 | 1.119 | 23.72 | 1592 | 15 | | | | | | | | | | |
| 6/23/2012 | 262873 | 0.0220 | 24 | 743.9 | 36.1 | 0.951 | 1.148 | 1.125 | 23.72 | 1601 | 14 | | | | | | | | | | |
| 6/26/2012 | 262864 | 0.0192 | 22 | 743.1 | 35.8 | 0.952 | 1.144 | 1.129 | 23.76 | 1609 | 12 | | | | | | | | | | |
| 6/29/2012 | 262855 | 0.0537 | 32 | 741.7 | 37.0 | 0.950 | 1.159 | 1.104 | 23.80 | 1577 | 34 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Valid Samples: 10 | | | | Monthly Average: 15 Standard Deviation: 7 Maximum: 34 Minimum: 9 | | | | | | | | | | | | | | | | | |
| Scheduled Samples: 10 | | | | Percent Data Captured: 100% | | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | | | |
| T_{av} = average temperature in degrees Celcius | | | | | | | | | | | | | | | | | | | | | |
| P_{av} = average station pressure in millimeters of mercury | | | | | | | | | | | | | | | | | | | | | |
| $P_f = ((Temp \text{ in } ^\circ\text{Kelvin} * \text{Temp Slope}) + \text{Temp Int.}) * 1.868$ | | | | | | | | | | | | | | | | | | | | | |
| $P_t = ((Temp \text{ in } ^\circ\text{Kelvin} * 0.0664) + (-0.4213)) * 1.868$ | | | | | | | | | | | | | | | | | | | | | |
| $P_o/P_a = \text{pressure ratio of } P_f \text{ and } P_{av} = 1 - P_f/P_{av}$ | | | | | | | | | | | | | | | | | | | | | |
| $Q_a = \text{look up table volumetric flow rate}$ | | | | | | | | | | | | | | | | | | | | | |
| $Q_{std} = \text{sample volumetric flow rate corrected to standard conditions}$ | | | | | | | | | | | | | | | | | | | | | |
| $V_{std} = \text{sample volume corrected to standard conditions}$ | | | | | | | | | | | | | | | | | | | | | |



PM₁₀ Analysis

The Doe Run Company

| National Site #2 - Soccer Field | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|---------------------------|----|----------------------|-------------------------|------------------------|---|---------------------------------------|---|-----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Sampler ID P2949 | | | | | | | | | | | | | | | | | | | | | |
| Sample Date 2012 | Filter ID | PM10 Filter Net Wt. | | T _{av} C | P _{av} mmHg | P _f mmHg | Ratio P _o /P _a | Q _a m ³ /min | Q _{std} m ³ /min | Elapsed Time hr | Sample Volume V _{std} m ³ | Mass Conc. PM ₁₀ µg/m ³ | | | | | | | | | |
| | | g | C | | | | | | | | | | | | | | | | | | |
| 6/2/2012 | 262247 | 0.0131 | 17 | 742.1 | 35.1 | 0.953 | 1.133 | 1.138 | 23.81 | 1625 | 8 | | | | | | | | | | |
| 6/5/2012 | 262238 | 0.0191 | 21 | 741.9 | 35.7 | 0.952 | 1.140 | 1.126 | 23.75 | 1605 | 12 | | | | | | | | | | |
| 6/8/2012 | 262221 | 0.0309 | 22 | 745.2 | 35.8 | 0.952 | 1.141 | 1.131 | 23.81 | 1616 | 19 | | | | | | | | | | |
| 6/11/2012 | 262211 | 0.0202 | 21 | 742.4 | 35.7 | 0.952 | 1.141 | 1.127 | 23.75 | 1606 | 13 | | | | | | | | | | |
| 6/14/2012 | 262209 | 0.0243 | 22 | 744.8 | 35.9 | 0.952 | 1.142 | 1.128 | 23.80 | 1611 | 15 | | | | | | | | | | |
| 6/17/2012 | 262899 | 0.0173 | 26 | 742.8 | 36.3 | 0.951 | 1.147 | 1.117 | 23.77 | 1593 | 11 | | | | | | | | | | |
| 6/20/2012 | 262890 | 0.0236 | 28 | 744.9 | 36.5 | 0.951 | 1.150 | 1.116 | 23.77 | 1591 | 15 | | | | | | | | | | |
| 6/23/2012 | 262872 | 0.0247 | 24 | 743.9 | 36.1 | 0.951 | 1.145 | 1.122 | 23.79 | 1602 | 15 | | | | | | | | | | |
| 6/26/2012 | 262863 | 0.0285 | 22 | 743.1 | 35.8 | 0.952 | 1.142 | 1.126 | 23.76 | 1605 | 18 | | | | | | | | | | |
| 6/29/2012 | 262854 | 0.0450 | 32 | 741.7 | 37.0 | 0.950 | 1.156 | 1.101 | 23.91 | 1580 | 28 | | | | | | | | | | |
| Valid Samples: 10 | | | | | | | | | Monthly Average: 15 | | | | | | | | | | | | |
| Scheduled Samples: 10 | | | | | | | | | Standard Deviation: 6 | | | | | | | | | | | | |
| Percent Data Captured: 100% | | | | | | | | | Maximum: 28 | | | | | | | | | | | | |
| | | | | | | | | | Minimum: 8 | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | | | |
| T _{av} = average temperature in degrees Celcius | | | | | | | | | | | | | | | | | | | | | |
| P _{av} = average station pressure in millimeters of mercury | | | | | | | | | | | | | | | | | | | | | |
| P _f = ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868 | | | | | | | | | | | | | | | | | | | | | |
| P _t = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | | | | | | | | | | | | | | | | | | |
| P _o /P _a = pressure ratio of P _f and P _{av} = 1 - P _f /P _{av} | | | | | | | | | | | | | | | | | | | | | |
| Q _a = look up table volumetric flow rate | | | | | | | | | | | | | | | | | | | | | |
| Q _{std} = sample volumetric flow rate corrected to standard conditions | | | | | | | | | | | | | | | | | | | | | |
| V _{std} = sample volume corrected to standard conditions | | | | | | | | | | | | | | | | | | | | | |



PM₁₀ Analysis

The Doe Run Company

| SAMPLER ID P2951 | | | | | | | | | | National Site #3 - Water Plant | | | | | | | | | | | |
|--|--------------|---------------------------|----|---|-------------------------|------------------------|---|---------------------------------------|---|--------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Sample Date 2012 | Filter ID | PM10 Filter Net Wt. | | T _{av} C | P _{av} mmHg | P _f mmHg | Ratio P _o /P _a | Q _a m ³ /min | Q _{std} m ³ /min | Elapsed Time hr | Sample Volume V _{std} m ³ | Mass Conc. PM ₁₀ μg/m ³ | | | | | | | | | |
| | | g | C | | | | | | | | | | | | | | | | | | |
| 6/2/2012 | 262245 | 0.0116 | 17 | 742.1 | 35.1 | 0.953 | 1.140 | 1.144 | 23.49 | 1612 | 7 | | | | | | | | | | |
| 6/5/2012 | 262236 | 0.0224 | 21 | 741.9 | 35.7 | 0.952 | 1.146 | 1.133 | 23.45 | 1594 | 14 | | | | | | | | | | |
| 6/8/2012 | 262226 | 0.0306 | 22 | 745.2 | 35.8 | 0.952 | 1.147 | 1.137 | 23.49 | 1603 | 19 | | | | | | | | | | |
| 6/11/2012 | 262216 | 0.0218 | 21 | 742.4 | 35.7 | 0.952 | 1.147 | 1.133 | 23.46 | 1595 | 14 | | | | | | | | | | |
| 6/14/2012 | 262207 | 0.0230 | 22 | 744.8 | 35.9 | 0.952 | 1.148 | 1.134 | 23.44 | 1595 | 14 | | | | | | | | | | |
| 6/17/2012 | 262897 | 0.0177 | 26 | 742.8 | 36.3 | 0.951 | 1.154 | 1.123 | 23.48 | 1583 | 11 | | | | | | | | | | |
| 6/20/2012 | 262888 | 0.0202 | 28 | 744.9 | 36.5 | 0.951 | 1.157 | 1.122 | 23.41 | 1576 | 13 | | | | | | | | | | |
| 6/23/2012 | 262876 | 0.0232 | 24 | 743.9 | 36.1 | 0.951 | 1.151 | 1.128 | 23.52 | 1592 | 15 | | | | | | | | | | |
| 6/26/2012 | 262868 | 0.0223 | 22 | 743.1 | 35.8 | 0.952 | 1.148 | 1.132 | 23.51 | 1597 | 14 | | | | | | | | | | |
| 6/29/2012 | 262858 | 0.0561 | 32 | 741.7 | 37.0 | 0.950 | 1.163 | 1.108 | 23.57 | 1567 | 36 | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Valid Samples: 10 | | | | Monthly Average: 16 | | | | | | | | | | | | | | | | | |
| Scheduled Samples: 10 | | | | Standard Deviation: 8 | | | | | | | | | | | | | | | | | |
| Percent Data Captured: 100% | | | | Maximum: 36 | | | | | | | | | | | | | | | | | |
| | | | | Minimum: 7 | | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | | | |
| T _{av} = average temperature in degrees Celcius | | | | P _o /P _a = pressure ratio of P _f and P _{av} = 1 - P _f /P _{av} | | | | | | | | | | | | | | | | | |
| P _{av} = average station pressure in millimeters of mercury | | | | Q _a = look up table volumetric flow rate | | | | | | | | | | | | | | | | | |
| P _f = ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868 | | | | Q _{std} = sample volumetric flow rate corrected to standard conditions | | | | | | | | | | | | | | | | | |
| P _f = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | V _{std} = sample volume corrected to standard conditions | | | | | | | | | | | | | | | | | |



PM₁₀ Analysis

The Doe Run Company

| SAMPLER ID P1019 | | Big River Site #4 - QA | | | | | | | | | | | | | | | | | | | | | | | |
|---|--------------|--------------------------------|----|----------------------|-------------------------|------------------------|---|---------------------------------------|---|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Sample Date 2012 | Filter ID | PM10 Filter Net Wt. g | | T _{av} C | P _{av} mmHg | P _f mmHg | Ratio P _o /P _a | Q _a m ³ /min | Q _{std} m ³ /min | Elapsed Time hr | Sample Volume V _{std} m ³ | Mass Conc. PM ₁₀ µg/m ³ | | | | | | | | | | | | | |
| 6/2/2012 | 262252 | 0.0148 | 17 | 742.1 | 35.1 | 0.953 | 1.152 | 1.156 | 23.86 | 1655 | 9 | | | | | | | | | | | | | | |
| 6/8/2012 | 262223 | 0.0308 | 22 | 745.2 | 35.8 | 0.952 | 1.159 | 1.150 | 23.83 | 1644 | 19 | | | | | | | | | | | | | | |
| 6/14/2012 | 262213 | 0.0301 | 22 | 744.8 | 35.9 | 0.952 | 1.161 | 1.147 | 23.83 | 1640 | 18 | | | | | | | | | | | | | | |
| 6/20/2012 | 262885 | 0.0206 | 28 | 744.9 | 36.5 | 0.951 | 1.169 | 1.134 | 23.84 | 1622 | 13 | | | | | | | | | | | | | | |
| 6/26/2012 | 262865 | 0.0281 | 22 | 743.1 | 35.8 | 0.952 | 1.160 | 1.144 | 24.10 | 1655 | 17 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Valid Samples: 5 | | Monthly Average: 15 | | | | | | | | | | | | | | | | | | | | | | | |
| Scheduled Samples: 5 | | Standard Deviation: 4 | | | | | | | | | | | | | | | | | | | | | | | |
| Percent Data Captured: 100% | | Maximum: 19 | | | | | | | | | | | | | | | | | | | | | | | |
| | | Minimum: 9 | | | | | | | | | | | | | | | | | | | | | | | |
| NOTES | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEFINITIONS and CALCULATIONS | | | | | | | | | | | | | | | | | | | | | | | | | |
| T _{av} = average temperature in degrees Celcius | | | | | | | | | | | | | | | | | | | | | | | | | |
| P _{av} = average station pressure in millimeters of mercury | | | | | | | | | | | | | | | | | | | | | | | | | |
| P _f = ((Temp in °Kelvin * Temp Slope))+Temp Int.)*1.868 | | | | | | | | | | | | | | | | | | | | | | | | | |
| P _o = ((Temp in °Kelvin * 0.0664)+(-0.4213))*1.868 | | | | | | | | | | | | | | | | | | | | | | | | | |
| P _o /P _a = pressure ratio of P _f and P _{av} = 1 - P _f /P _{av} | | | | | | | | | | | | | | | | | | | | | | | | | |
| Q _a = look up table volumetric flow rate | | | | | | | | | | | | | | | | | | | | | | | | | |
| Q _{std} = sample volumetric flow rate corrected to standard conditions | | | | | | | | | | | | | | | | | | | | | | | | | |
| V _{std} = sample volume corrected to standard conditions | | | | | | | | | | | | | | | | | | | | | | | | | |

Lab Results (Lead and Cadmium)



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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0588
Date Received: 06/21/12
Analysis Method: 40 CFR §50
Appendix G

Location**National**

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|---------------|--------------|--------------|----------------|
| 123024 | 8540311 | 06/01/12 | #3 East - WTP | 22 | < 10 | 06/29/12 - DS |
| 123027 | 8540302 | 06/04/12 | #3 East - WTP | 35 | < 10 | 06/29/12 - DS |
| 123030 | 8593193 | 06/05/12 | #3 East - WTP | 43 | < 10 | 06/29/12 - DS |
| 123033 | 8593185 | 06/06/12 | #3 East - WTP | 66 | < 10 | 06/29/12 - DS |
| 123036 | 8593174 | 06/07/12 | #3 East - WTP | 68 | < 10 | 06/29/12 - DS |
| 123039 | 8593166 | 06/08/12 | #3 East - WTP | 128 | < 10 | 06/29/12 - DS |
| 123058 | 8540308 | 06/01/12 | #1 Ozark | 11 | < 10 | 06/29/12 - DS |
| 123059 | 8540309 | 06/01/12 | #2 Soccer | 13 | < 10 | 06/29/12 - DS |
| 123060 | 8593199 | 06/04/12 | #1 Ozark | 13 | < 10 | 06/29/12 - DS |
| 123061 | 8593200 | 06/04/12 | #2 Soccer | 14 | < 10 | 06/29/12 - DS |
| 123062 | 8593190 | 06/05/12 | #1 Ozark | < 10 | < 10 | 06/29/12 - DS |
| 123063 | 8593191 | 06/05/12 | #2 Soccer | 101 | < 10 | 06/29/12 - DS |
| 123064 | 8593188 | 06/06/12 | #1 Ozark | < 10 | < 10 | 06/29/12 - DS |
| 123065 | 8593189 | 06/06/12 | #2 Soccer | 124 | < 10 | 06/29/12 - DS |
| 123066 | 8593171 | 06/07/12 | #1 Ozark | 17 | < 10 | 06/29/12 - DS |
| 123067 | 8593172 | 06/07/12 | #2 Soccer | 95 | < 10 | 06/29/12 - DS |
| 123068 | 8593163 | 06/08/12 | #1 Ozark | 16 | < 10 | 06/29/12 - DS |
| 123069 | 8593162 | 06/08/12 | #2 Soccer | 37 | < 10 | 06/29/12 - DS |

Submitted by:

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0608
Date Received: 06/27/12
Analysis Method: 40 CFR §50
Appendix G

Location**National**

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|---------------|--------------|--------------|----------------|
| 123150 | 8593156 | 06/11/12 | #3 East - WTP | < 10 | < 10 | 07/09/12 - DS |
| 123153 | 8593147 | 06/12/12 | #3 East - WTP | 19 | < 10 | 07/09/12 - DS |
| 123156 | 8593137 | 06/13/12 | #3 East - WTP | 21 | < 10 | 07/09/12 - DS |
| 123159 | 8593127 | 06/14/12 | #3 East - WTP | 23 | < 10 | 07/09/12 - DS |
| 123162 | 8593118 | 06/15/12 | #3 East - WTP | 29 | < 10 | 07/12/12 - DS |
| 123178 | 8593160 | 06/11/12 | #1 Ozark | < 10 | < 10 | 07/09/12 - DS |
| 123179 | 8593161 | 06/11/12 | #2 Soccer | 29 | < 10 | 07/09/12 - DS |
| 123180 | 8593150 | 06/12/12 | #1 Ozark | < 10 | < 10 | 07/09/12 - DS |
| 123181 | 8593151 | 06/12/12 | #2 Soccer | 25 | < 10 | 07/09/12 - DS |
| 123182 | 8593134 | 06/13/12 | #1 Ozark | 22 | < 10 | 07/09/12 - DS |
| 123183 | 8593135 | 06/13/12 | #2 Soccer | 27 | < 10 | 07/09/12 - DS |
| 123184 | 8593124 | 06/14/12 | #1 Ozark | 28 | < 10 | 07/09/12 - DS |
| 123185 | 8593125 | 06/14/12 | #2 Soccer | 34 | < 10 | 07/09/12 - DS |
| 123186 | 8593115 | 06/15/12 | #1 Ozark | 20 | < 10 | 07/09/12 - DS |
| 123187 | 8593116 | 06/15/12 | #2 Soccer | 27 | < 10 | 07/09/12 - DS |

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0623
Date Received: 07/03/12
Analysis Method: 40 CFR §50
Appendix G

Location**National**

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|---------------|--------------|--------------|----------------|
| 123267 | 8593108 | 06/18/12 | #3 East - WTP | 15 | < 10 | 07/13/12 - DS |
| 123270 | 8593499 | 06/19/12 | #3 East - WTP | 27 | < 10 | 07/16/12 - DS |
| 123273 | 8593490 | 06/20/12 | #3 East - WTP | 18 | < 10 | 07/16/12 - DS |
| 123276 | 8593481 | 06/21/12 | #3 East - WTP | 85 | < 10 | 07/16/12 - DS |
| 123279 | 8593471 | 06/22/12 | #3 East - WTP | 18 | < 10 | 07/13/12 - DS |
| 123295 | 8593105 | 06/18/12 | #1 Ozark | 68 | < 10 | 07/13/12 - DS |
| 123296 | 8593106 | 06/18/12 | #2 Soccer | 80 | < 10 | 07/13/12 - DS |
| 123297 | 8593496 | 06/19/12 | #1 Ozark | 55 | < 10 | 07/13/12 - DS |
| 123298 | 8593497 | 06/19/12 | #2 Soccer | 247 | < 10 | 07/16/12 - DS |
| 123299 | 8593487 | 06/20/12 | #1 Ozark | 66 | < 10 | 07/16/12 - DS |
| 123300 | 8593488 | 06/20/12 | #2 Soccer | 72 | < 10 | 07/16/12 - DS |
| 123301 | 8593485 | 06/21/12 | #1 Ozark | 22 | < 10 | 07/16/12 - DS |
| 123302 | 8593486 | 06/21/12 | #2 Soccer | 91 | < 10 | 07/16/12 - DS |
| 123303 | 8593469 | 06/22/12 | #1 Ozark | 21 | < 10 | 07/16/12 - DS |
| 123304 | 8593468 | 06/22/12 | #2 Soccer | 38 | < 10 | 07/16/12 - DS |

Submitted by:

Digitally signed by Jennifer Vandebilt, on behalf of Inovatia Laboratories, LLC, On-Quality Assurance, on 2012-07-17 16:51:43 -05'00'

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0685
Date Received: 07/18/12
Analysis Method: 40 CFR §50
Appendix G

Location **National**

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|---------------|--------------|--------------|----------------|
| 123532 | 8593462 | 06/25/12 | #3 East - WTP | 41 | < 10 | 07/24/12 - DS |
| 123535 | 8593452 | 06/26/12 | #3 East - WTP | 30 | < 10 | 07/24/12 - DS |
| 123538 | 8593444 | 06/27/12 | #3 East - WTP | 50 | < 10 | 07/24/12 - DS |
| 123541 | 8593435 | 06/29/12 | #3 East - WTP | 161 | < 10 | 07/24/12 - DS |
| 123555 | 8593466 | 06/25/12 | #1 Ozark | < 10 | < 10 | 07/24/12 - DS |
| 123556 | 8593467 | 06/25/12 | #2 Soccer | 96 | < 10 | 07/24/12 - DS |
| 123557 | 8593449 | 06/26/12 | #1 Ozark | 14 | < 10 | 07/24/12 - DS |
| 123558 | 8593450 | 06/26/12 | #2 Soccer | 89 | < 10 | 07/24/12 - DS |
| 123559 | 8593447 | 06/27/12 | #1 Ozark | 42 | < 10 | 07/24/12 - DS |
| 123560 | 8593448 | 06/27/12 | #2 Soccer | 44 | < 10 | 07/24/12 - DS |
| 123561 | 8593438 | 06/29/12 | #1 Ozark | 33 | < 10 | 07/24/12 - DS |
| 123562 | 8593439 | 06/29/12 | #2 Soccer | 29 | < 10 | 07/24/12 - DS |

Submitted by: _____

Digitally signed by Jennifer Vandelicht
Date: 2012-07-27 11:40:42
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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0588
Date Received: 06/21/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|------------|--------------|--------------|----------------|
| 123014 | 8540313 | 06/01/12 | #4 Primary | 68 | < 10 | 06/29/12 - DS |
| 123015 | 8540304 | 06/04/12 | #4 Primary | 91 | < 10 | 06/29/12 - DS |
| 123016 | 8593195 | 06/05/12 | #4 Primary | 32 | < 10 | 06/29/12 - DS |
| 123017 | 8540314 | 06/05/12 | #4 QA | 31 | < 10 | 06/29/12 - DS |
| 123018 | 8593187 | 06/06/12 | #4 Primary | 25 | < 10 | 06/29/12 - DS |
| 123019 | 8593176 | 06/07/12 | #4 Primary | 35 | < 10 | 06/29/12 - DS |
| 123020 | 8593177 | 06/07/12 | #4 QA | 153 | < 10 | 06/29/12 - DS |
| 123021 | 8593164 | 06/08/12 | #4 Primary | 57 | < 10 | 06/29/12 - DS |

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0608
Date Received: 06/27/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|------------|--------------|--------------|----------------|
| 123141 | 8593158 | 06/11/12 | #4 Primary | 20 | < 10 | 07/09/12 - DS |
| 123142 | 8593149 | 06/12/12 | #4 Primary | 79 | < 10 | 07/09/12 - DS |
| 123143 | 8593159 | 06/12/12 | #4 QA | 76 | < 10 | 07/09/12 - DS |
| 123144 | 8593139 | 06/13/12 | #4 Primary | 37 | < 10 | 07/09/12 - DS |
| 123145 | 8593129 | 06/14/12 | #4 Primary | 99 | < 10 | 07/09/12 - DS |
| 123146 | 8593130 | 06/14/12 | #4 QA | 106 | < 10 | 07/09/12 - DS |
| 123147 | 8593120 | 06/15/12 | #4 Primary | 30 | < 10 | 07/09/12 - DS |

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0623
Date Received: 07/03/12
Analysis Method: 40 CFR §50
Appendix G

Location Big River

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|------------|--------------|--------------|----------------|
| 123258 | 8593110 | 06/18/12 | #4 Primary | < 10 | < 10 | 07/13/12 - DS |
| 123259 | 8593101 | 06/19/12 | #4 Primary | 11 | < 10 | 07/13/12 - DS |
| 123260 | 8593111 | 06/19/12 | #4 QA | 14 | < 10 | 07/13/12 - DS |
| 123261 | 8593492 | 06/20/12 | #4 Primary | 21 | < 10 | 07/13/12 - DS |
| 123262 | 8593483 | 06/21/12 | #4 Primary | 167 | < 10 | 07/13/12 - DS |
| 123263 | 8593484 | 06/21/12 | #4 QA | 153 | < 10 | 07/13/12 - DS |
| 123264 | 8593476 | 06/22/12 | #4 Primary | 54 | < 10 | 07/13/12 - DS |

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ANALYSIS REPORT

Client Information:

Barr Engineering Company
7390 Ohms Lane
Edina, MN 55439-2330

Chain of Custody No.: 12-0685
Date Received: 07/18/12
Analysis Method: 40 CFR §50
Appendix G

Location **Big River**

| Lab No. | Filter ID | Date | Site | µg Pb/Filter | µg Cd/Filter | Date - Analyst |
|---------|-----------|----------|------------|--------------|--------------|----------------|
| 123525 | 8593464 | 06/25/12 | #4 Primary | 48 | < 10 | 07/24/12 - DS |
| 123526 | 8593454 | 06/26/12 | #4 Primary | 48 | < 10 | 07/24/12 - DS |
| 123527 | 8593465 | 06/26/12 | #4 QA | 54 | < 10 | 07/24/12 - DS |
| 123528 | 8593446 | 06/27/12 | #4 Primary | 27 | < 10 | 07/24/12 - DS |
| 123529 | 8593437 | 06/29/12 | #4 Primary | 118 | < 10 | 07/24/12 - DS |

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-05'00'

7/27/12

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Meteorological Data

Meteorological Report
The Doe Run Company
Wind Speed

Site Name: Rivermines

Average Interval: 01 Hour

Units: mph

Sampling Frequency: 01 Second

| Sum of WS | Hour | 24 Hour Avg | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|------|-------------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|------|-----|
| | | ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1-Jun | 6.6 | 6.7 | 6.0 | 7.0 | 6.9 | 6.9 | 6.1 | 6.3 | 7.4 | 8.2 | 6.1 | 5.8 | 4.9 | 6.6 | 4.9 | 3.1 | 3.8 | 1.8 | 0.6 | 0.2 | 0.3 | 0.1 | 0.8 | 0.3 | 8.2 | 4.5 |
| 2-Jun | 0.9 | 0.0 | 1.2 | 0.2 | 0.2 | 0.4 | 0.4 | 1.2 | 2.0 | 2.3 | 3.9 | 4.2 | 3.6 | 3.8 | 3.6 | 4.2 | 3.4 | 2.0 | 1.0 | 0.6 | 0.1 | 0.1 | 0.4 | 1.0 | 4.2 | 1.7 |
| 3-Jun | 1.3 | 1.4 | 1.1 | 1.3 | 0.6 | 1.6 | 0.1 | 0.3 | 1.6 | 1.7 | 2.7 | 2.4 | 3.1 | 2.6 | 3.0 | 2.4 | 0.4 | 0.8 | 0.6 | 1.0 | 1.8 | 0.8 | 0.4 | 0.5 | 3.1 | 1.4 |
| 4-Jun | 0.1 | 0.6 | 0.8 | 1.4 | 0.8 | 0.1 | 0.7 | 1.4 | 1.5 | 2.2 | 3.2 | 2.9 | 3.1 | 3.5 | 3.1 | 4.8 | 3.8 | 3.0 | 3.8 | 4.1 | 5.3 | 4.5 | 2.9 | 1.7 | 5.3 | 2.5 |
| 5-Jun | 1.4 | 2.0 | 1.1 | 0.4 | 0.1 | 0.1 | 1.3 | 2.9 | 3.2 | 5.6 | 5.8 | 6.2 | 6.7 | 6.2 | 7.2 | 7.5 | 7.4 | 5.6 | 3.7 | 1.3 | 0.5 | 0.4 | 0.3 | 0.4 | 7.5 | 3.2 |
| 6-Jun | 0.1 | 0.4 | 0.8 | 0.2 | 0.0 | 0.4 | 1.9 | 2.5 | 3.4 | 5.6 | 5.0 | 5.7 | 6.2 | 6.4 | 5.9 | 5.4 | 5.1 | 4.2 | 2.3 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 6.4 | 2.6 |
| 7-Jun | 0.3 | 0.4 | 0.6 | 0.5 | 0.7 | 0.7 | 0.8 | 2.8 | 3.9 | 4.8 | 5.2 | 5.0 | 4.7 | 4.2 | 4.4 | 3.5 | 2.8 | 1.4 | 0.6 | 0.5 | 0.3 | 0.3 | 0.7 | 5.2 | 2.1 | |
| 8-Jun | 0.7 | 0.4 | 0.5 | 0.4 | 1.1 | 1.3 | 0.5 | 0.3 | 1.2 | 3.7 | 4.7 | 4.7 | 4.8 | 4.5 | 4.0 | 4.4 | 3.0 | 4.0 | 3.4 | 2.8 | 3.5 | 3.0 | 2.4 | 0.1 | 4.8 | 2.5 |
| 9-Jun | 0.0 | 0.2 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 | 5.4 | 6.8 | 8.2 | 7.1 | 8.1 | 6.9 | 7.9 | 6.7 | 5.6 | 6.5 | 9.0 | 5.9 | 3.4 | 1.6 | 2.1 | 2.1 | 3.4 | 9.0 | 4.0 |
| 10-Jun | 3.8 | 4.0 | 2.8 | 2.5 | 3.1 | 3.3 | 5.0 | 5.7 | 5.9 | 5.9 | 5.9 | 6.1 | 6.7 | 6.0 | 7.2 | 6.2 | 7.8 | 6.9 | 7.0 | 5.2 | 4.9 | 4.5 | 4.5 | 1.5 | 7.8 | 5.1 |
| 11-Jun | 1.2 | 3.3 | 2.9 | 2.6 | 1.8 | 3.3 | 4.0 | 6.7 | 7.9 | 6.9 | 8.0 | 3.3 | 3.3 | 7.6 | 7.5 | 1.9 | 1.6 | 1.3 | 0.3 | 0.2 | 0.8 | 0.9 | 0.6 | 1.5 | 8.0 | 3.3 |
| 12-Jun | 0.5 | 0.2 | 0.5 | 0.5 | 2.1 | 3.0 | 3.9 | 3.9 | 5.0 | 6.3 | 5.9 | 5.6 | 5.7 | 6.8 | 6.8 | 7.3 | 6.5 | 6.0 | 5.5 | 0.9 | 0.6 | 0.3 | 0.6 | 0.0 | 7.3 | 3.5 |
| 13-Jun | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.2 | 0.7 | 1.2 | 3.0 | 2.8 | 3.3 | 3.7 | 3.7 | 3.5 | 3.7 | 4.2 | 4.2 | 3.3 | 0.4 | 0.0 | 0.3 | 0.4 | 0.8 | 4.2 | 1.7 |
| 14-Jun | 0.4 | 0.0 | 0.8 | 0.0 | 0.9 | 0.7 | 0.3 | 1.9 | 2.1 | 4.1 | 4.5 | 3.8 | 4.8 | 5.0 | 5.0 | 5.3 | 4.6 | 4.4 | 3.7 | 2.4 | 3.5 | 3.2 | 1.0 | 0.2 | 5.3 | 2.6 |
| 15-Jun | 0.8 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 2.8 | 3.5 | 3.4 | 7.8 | 5.5 | 5.5 | 5.8 | 5.6 | 6.2 | 5.9 | 6.3 | 4.0 | 3.0 | 3.6 | 3.4 | 0.5 | 1.1 | 7.8 | 3.1 |
| 16-Jun | 0.2 | 0.7 | 2.3 | 1.8 | 3.2 | 3.8 | 4.3 | 6.1 | 6.0 | 6.2 | 6.9 | 7.0 | 7.0 | 8.2 | 7.9 | 9.0 | 10.6 | 9.3 | 9.2 | 7.0 | 4.8 | 5.8 | 4.8 | 3.9 | 10.6 | 5.7 |
| 17-Jun | 4.1 | 4.2 | 4.3 | 3.5 | 3.5 | 2.2 | 2.3 | 3.2 | 3.1 | 4.0 | 3.4 | 1.9 | 3.0 | 4.4 | 5.3 | 6.9 | 6.8 | 5.3 | 5.7 | 4.5 | 5.3 | 7.0 | 8.4 | 8.4 | 8.4 | 4.8 |
| 18-Jun | 6.6 | 6.8 | 6.0 | 5.8 | 7.5 | 6.9 | 5.1 | 5.9 | 8.0 | 7.5 | 9.4 | 9.8 | 10.1 | 11.4 | 11.3 | 11.7 | 10.5 | 9.7 | 9.3 | 8.2 | 7.6 | 8.0 | 7.2 | 6.3 | 11.7 | 8.2 |
| 19-Jun | 6.1 | 6.1 | 5.2 | 4.2 | 3.8 | 4.0 | 6.1 | 8.6 | 9.8 | 10.9 | 10.3 | 10.8 | 10.8 | 10.2 | 10.1 | 10.6 | 10.0 | 9.4 | 7.8 | 8.1 | 4.3 | 3.1 | 2.7 | 4.2 | 10.9 | 7.3 |
| 20-Jun | 3.5 | 3.0 | 2.9 | 2.7 | 4.2 | 4.9 | 7.7 | 7.5 | 8.0 | 9.1 | 9.0 | 7.7 | 8.5 | 8.6 | 8.1 | 7.8 | 9.3 | 9.1 | 7.7 | 4.8 | 3.9 | 3.4 | 8.0 | 3.6 | 9.3 | 6.3 |
| 21-Jun | 2.1 | 0.6 | 0.7 | 0.2 | 0.5 | 0.6 | 2.3 | 4.5 | 5.1 | 8.1 | 4.4 | 4.8 | 8.3 | 7.6 | 5.6 | 5.5 | 6.3 | 5.9 | 3.9 | 3.8 | 2.1 | 0.3 | 0.2 | 0.3 | 8.3 | 3.5 |
| 22-Jun | 0.6 | 0.5 | 0.8 | 0.5 | 0.4 | 0.2 | 0.5 | 1.9 | 3.3 | 4.4 | 4.1 | 4.2 | 4.6 | 4.3 | 4.8 | 4.9 | 5.1 | 4.8 | 3.9 | 1.6 | 0.4 | 0.1 | 0.1 | 0.3 | 5.1 | 2.3 |
| 23-Jun | 0.3 | 0.6 | 0.6 | 0.1 | 0.1 | 0.4 | 0.2 | 0.8 | 3.5 | 2.6 | 2.6 | 3.1 | 3.9 | 3.2 | 3.5 | 3.9 | 5.1 | 4.3 | 2.6 | 1.4 | 1.0 | 0.5 | 0.1 | 0.0 | 5.1 | 1.8 |
| 24-Jun | 0.1 | 0.2 | 0.3 | 0.2 | 0.1 | 0.3 | 0.5 | 0.1 | 1.2 | 2.2 | 2.1 | 3.5 | 3.4 | 3.9 | 3.5 | 2.8 | 2.8 | 2.1 | 3.1 | 1.8 | 2.4 | 2.8 | 3.3 | 0.5 | 3.9 | 1.8 |
| 25-Jun | 0.1 | 0.7 | 0.8 | 0.3 | 0.5 | 1.1 | 0.7 | 1.4 | 6.0 | 5.4 | 5.9 | 6.1 | 6.4 | 7.0 | 7.2 | 7.4 | 6.8 | 7.6 | 5.4 | 4.3 | 5.3 | 2.8 | 1.2 | 0.4 | 7.6 | 3.8 |
| 26-Jun | 0.0 | 0.4 | 0.1 | 0.3 | 0.2 | 0.0 | 0.3 | 2.9 | 5.1 | 5.2 | 4.0 | 4.7 | 5.1 | 5.5 | 4.5 | 4.2 | 4.3 | 3.5 | 2.4 | 0.5 | 0.0 | 0.1 | 0.2 | 0.1 | 5.5 | 2.2 |
| 27-Jun | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.7 | 4.8 | 5.3 | 4.6 | 4.3 | 4.4 | 3.8 | 3.8 | 3.8 | 4.0 | 4.9 | 5.9 | 4.9 | 3.0 | 4.0 | 4.1 | 2.8 | 2.7 | 5.9 | 3.0 |
| 28-Jun | 2.8 | 1.1 | 1.8 | 1.9 | 0.8 | 0.8 | 0.9 | 2.7 | 2.7 | 3.3 | 4.2 | 4.3 | 3.8 | 4.4 | 3.8 | 3.0 | 2.7 | 2.1 | 0.8 | 1.4 | 1.6 | 1.1 | 0.7 | 1.2 | 4.4 | 2.2 |
| 29-Jun | 1.3 | 0.8 | 1.8 | 1.2 | 1.3 | 1.1 | 0.8 | 0.9 | 2.8 | 2.7 | 3.0 | 3.1 | 3.6 | 3.4 | 3.7 | 3.8 | 5.3 | 5.2 | 3.8 | 3.0 | 2.3 | 4.1 | 1.3 | 0.3 | 5.3 | 2.5 |
| 30-Jun | 0.7 | 0.8 | 1.0 | 1.1 | 1.6 | 1.0 | 1.4 | 1.7 | 3.0 | 3.4 | 3.9 | 3.1 | 4.4 | 5.8 | 5.4 | 4.1 | 5.6 | 4.6 | 2.9 | 2.5 | 1.3 | 4.2 | 4.3 | 1.1 | 5.8 | 2.9 |

| | | | |
|---|---|--------------------|---------------|
|  | Maximum Hour//Monthly Average Total Hours In Month Valid Hours//Percent Data Captured | 11.7 720 720 | 3.4 100.0% |
|---|---|--------------------|---------------|

Meteorological Report
The Doe Run Company
Wind Direction

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

Sampling Frequency: 01 Second

| Sum of WD | Hour | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 24 Hour Avg |
| 1-Jun | 323 | 331 | 327 | 331 | 323 | 325 | 326 | 319 | 324 | 324 | 312 | 305 | 301 | 324 | 311 | 293 | 305 | 285 | 279 | 187 | 184 | 185 | 179 | 211 | 288 |
| 2-Jun | 248 | 199 | 224 | 181 | 198 | 236 | 247 | 249 | 223 | 238 | 222 | 233 | 238 | 248 | 263 | 288 | 284 | 266 | 245 | 195 | 182 | 175 | 219 | 242 | 231 |
| 3-Jun | 237 | 233 | 234 | 180 | 179 | 223 | 240 | 298 | 231 | 254 | 241 | 223 | 56 | 234 | 233 | 238 | 213 | 211 | 340 | 161 | 209 | 17 | 242 | 187 | 213 |
| 4-Jun | 177 | 163 | 217 | 157 | 211 | 208 | 233 | 250 | 275 | 264 | 272 | 290 | 280 | 278 | 280 | 305 | 302 | 314 | 12 | 16 | 20 | 22 | 50 | 41 | 183 |
| 5-Jun | 18 | 16 | 15 | 186 | 179 | 200 | 4 | 8 | 5 | 5 | 20 | 20 | 25 | 22 | 16 | 12 | 13 | 16 | 23 | 49 | 70 | 187 | 186 | 172 | 61 |
| 6-Jun | 174 | 169 | 193 | 168 | 157 | 18 | 19 | 47 | 62 | 31 | 34 | 32 | 25 | 27 | 24 | 25 | 27 | 31 | 37 | 34 | 190 | 180 | 176 | 179 | 88 |
| 7-Jun | 191 | 192 | 199 | 189 | 210 | 227 | 243 | 262 | 17 | 36 | 84 | 33 | 33 | 46 | 47 | 27 | 40 | 62 | 23 | 74 | 185 | 180 | 175 | 179 | 123 |
| 8-Jun | 177 | 199 | 189 | 202 | 208 | 210 | 234 | 302 | 86 | 127 | 113 | 108 | 141 | 130 | 163 | 180 | 158 | 145 | 153 | 155 | 167 | 155 | 146 | 94 | 164 |
| 9-Jun | 309 | 172 | 185 | 184 | 193 | 186 | 265 | 168 | 177 | 175 | 180 | 186 | 189 | 197 | 191 | 166 | 165 | 179 | 179 | 187 | 169 | 183 | 172 | 166 | 188 |
| 10-Jun | 179 | 181 | 176 | 147 | 168 | 165 | 157 | 165 | 154 | 139 | 168 | 167 | 158 | 166 | 177 | 176 | 182 | 163 | 159 | 160 | 171 | 178 | 186 | 154 | 166 |
| 11-Jun | 165 | 172 | 179 | 176 | 170 | 192 | 196 | 215 | 214 | 222 | 328 | 18 | 191 | 198 | 183 | 267 | 271 | 253 | 259 | 225 | 201 | 241 | 245 | 229 | 209 |
| 12-Jun | 238 | 228 | 238 | 204 | 332 | 333 | 342 | 350 | 355 | 356 | 1 | 353 | 337 | 334 | 342 | 334 | 338 | 340 | 349 | 358 | 186 | 178 | 191 | 181 | 283 |
| 13-Jun | 172 | 166 | 160 | 174 | 193 | 230 | 210 | 247 | 21 | 87 | 49 | 342 | 356 | 36 | 50 | 80 | 89 | 92 | 108 | 107 | 260 | 184 | 184 | 202 | 158 |
| 14-Jun | 183 | 244 | 207 | 184 | 182 | 222 | 356 | 357 | 148 | 160 | 173 | 145 | 140 | 132 | 151 | 148 | 127 | 162 | 146 | 154 | 164 | 158 | 145 | 169 | 182 |
| 15-Jun | 23 | 348 | 146 | 171 | 164 | 207 | 133 | 168 | 188 | 202 | 188 | 183 | 157 | 149 | 164 | 160 | 171 | 183 | 191 | 159 | 174 | 179 | 188 | 173 | 174 |
| 16-Jun | 227 | 214 | 224 | 212 | 208 | 203 | 186 | 214 | 210 | 214 | 215 | 207 | 206 | 207 | 211 | 198 | 203 | 203 | 206 | 202 | 198 | 190 | 255 | 311 | 213 |
| 17-Jun | 180 | 216 | 216 | 212 | 224 | 223 | 215 | 238 | 240 | 234 | 229 | 282 | 240 | 212 | 232 | 203 | 204 | 212 | 193 | 185 | 179 | 186 | 192 | 195 | 214 |
| 18-Jun | 197 | 207 | 212 | 207 | 206 | 208 | 210 | 211 | 217 | 218 | 210 | 210 | 203 | 195 | 207 | 194 | 196 | 201 | 191 | 192 | 190 | 192 | 196 | 203 | 203 |
| 19-Jun | 193 | 188 | 190 | 186 | 172 | 191 | 207 | 203 | 204 | 206 | 201 | 197 | 196 | 191 | 194 | 197 | 190 | 184 | 188 | 183 | 177 | 173 | 167 | 168 | 189 |
| 20-Jun | 172 | 169 | 170 | 178 | 184 | 197 | 202 | 210 | 217 | 205 | 197 | 208 | 208 | 207 | 189 | 201 | 198 | 199 | 188 | 177 | 192 | 201 | 222 | 195 | |
| 21-Jun | 230 | 245 | 232 | 215 | 218 | 210 | 228 | 224 | 227 | 208 | 251 | 298 | 323 | 334 | 330 | 330 | 341 | 347 | 329 | 337 | 323 | 210 | 204 | 190 | 266 |
| 22-Jun | 188 | 188 | 188 | 189 | 222 | 181 | 260 | 27 | 10 | 15 | 9 | 26 | 1 | 351 | 356 | 5 | 26 | 17 | 31 | 28 | 44 | 191 | 185 | 181 | 122 |
| 23-Jun | 178 | 176 | 174 | 183 | 173 | 206 | 311 | 157 | 115 | 102 | 114 | 359 | 28 | 358 | 40 | 101 | 84 | 107 | 84 | 78 | 116 | 190 | 185 | 234 | 161 |
| 24-Jun | 110 | 183 | 187 | 201 | 189 | 194 | 240 | 195 | 260 | 278 | 217 | 37 | 109 | 137 | 126 | 158 | 94 | 34 | 99 | 97 | 144 | 174 | 175 | 219 | 161 |
| 25-Jun | 204 | 196 | 203 | 208 | 237 | 248 | 254 | 280 | 349 | 7 | 16 | 23 | 15 | 17 | 17 | 17 | 20 | 14 | 21 | 24 | 24 | 32 | 31 | 54 | 105 |
| 26-Jun | 67 | 32 | 112 | 190 | 183 | 258 | 295 | 111 | 115 | 107 | 116 | 76 | 54 | 43 | 63 | 70 | 73 | 70 | 88 | 112 | 194 | 211 | 175 | 175 | 125 |
| 27-Jun | 191 | 319 | 176 | 189 | 305 | 180 | 184 | 170 | 162 | 182 | 173 | 211 | 208 | 223 | 243 | 201 | 199 | 208 | 203 | 187 | 193 | 218 | 233 | 224 | 207 |
| 28-Jun | 218 | 230 | 203 | 222 | 213 | 230 | 242 | 250 | 257 | 282 | 293 | 311 | 290 | 317 | 298 | 267 | 268 | 274 | 266 | 180 | 178 | 173 | 224 | 233 | 247 |
| 29-Jun | 231 | 207 | 230 | 217 | 187 | 237 | 287 | 273 | 285 | 276 | 274 | 269 | 325 | 235 | 236 | 231 | 231 | 225 | 224 | 204 | 207 | 210 | 255 | 227 | 241 |
| 30-Jun | 213 | 174 | 184 | 187 | 208 | 233 | 250 | 271 | 281 | 290 | 308 | 285 | 228 | 222 | 225 | 230 | 228 | 228 | 215 | 197 | 187 | 201 | 221 | 240 | 229 |

| | |
|-----------------------|--------|
| Total Hours in Month | 720 |
| Valid Hours | 720 |
| Percent Data Captured | 100.0% |

DR MET 0612 - WD

Meteorological Report

The Doe Run Company

$\Sigma \theta$

Site Name: Rivermines

Average Interval: 01 Hour

Units: Degrees

| Sum of Sig | Hour | | | | | | | | | | | | | | | | | | | | | | | | 24 Hour Avg |
|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------|
| | ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 1-Jun | 22.0 | 21.3 | 19.6 | 19.8 | 22.7 | 20.5 | 24.2 | 31.0 | 27.1 | 24.9 | 38.6 | 38.8 | 42.5 | 34.7 | 37.8 | 41.9 | 36.4 | 39.8 | 25.1 | 4.2 | 2.9 | 2.9 | 11.7 | 10.4 | 25 |
| 2-Jun | 11.9 | 2.1 | 18.3 | 10.4 | 7.2 | 8.5 | 11.1 | 27.4 | 30.4 | 33.2 | 30.0 | 44.6 | 45.2 | 48.0 | 51.8 | 42.1 | 46.9 | 46.7 | 30.4 | 6.8 | 1.4 | 2.1 | 10.2 | 16.2 | 24 |
| 3-Jun | 18.4 | 20.4 | 19.9 | 17.4 | 14.4 | 25.1 | 8.8 | 18.2 | 38.3 | 44.2 | 39.2 | 41.2 | 39.1 | 37.8 | 24.7 | 23.7 | 7.2 | 9.3 | 11.3 | 7.8 | 13.6 | 37.4 | 31.4 | 13.6 | 23 |
| 4-Jun | 1.5 | 32.4 | 9.1 | 34.2 | 11.2 | 12.7 | 20.3 | 33.7 | 49.7 | 47.2 | 50.8 | 47.1 | 53.8 | 49.7 | 48.5 | 42.5 | 40.1 | 30.8 | 31.3 | 25.9 | 22.3 | 23.7 | 30.6 | 26.5 | 32 |
| 5-Jun | 18.3 | 15.4 | 14.5 | 3.8 | 1.8 | 5.2 | 18.3 | 22.3 | 36.7 | 25.8 | 33.3 | 29.9 | 32.1 | 31.9 | 27.1 | 24.8 | 26.0 | 23.5 | 20.8 | 26.4 | 16.5 | 10.0 | 4.3 | 2.8 | 20 |
| 6-Jun | 1.9 | 4.3 | 8.5 | 4.3 | 0.6 | 16.2 | 28.4 | 40.6 | 40.1 | 32.4 | 41.3 | 40.8 | 37.3 | 34.9 | 30.0 | 34.2 | 35.6 | 30.6 | 25.5 | 9.5 | 3.1 | 4.2 | 1.1 | 4.6 | 21 |
| 7-Jun | 7.7 | 10.8 | 13.4 | 8.0 | 11.1 | 18.7 | 24.8 | 34.4 | 29.9 | 42.0 | 40.2 | 45.7 | 43.7 | 43.8 | 43.7 | 37.8 | 40.3 | 37.5 | 17.9 | 9.3 | 4.4 | 1.5 | 1.8 | 8.6 | 24 |
| 8-Jun | 9.3 | 9.2 | 11.1 | 11.5 | 15.2 | 17.0 | 22.2 | 21.5 | 35.6 | 42.8 | 35.3 | 37.8 | 41.7 | 44.3 | 46.7 | 40.2 | 46.4 | 28.2 | 22.1 | 12.2 | 15.8 | 16.1 | 14.2 | 4.6 | 25 |
| 9-Jun | 0.9 | 2.1 | 1.8 | 4.6 | 10.5 | 5.9 | 17.4 | 31.5 | 23.4 | 27.6 | 28.2 | 30.2 | 28.9 | 26.9 | 27.4 | 23.4 | 24.6 | 24.2 | 21.8 | 18.1 | 10.9 | 18.6 | 21.2 | 19.0 | 19 |
| 10-Jun | 17.3 | 19.4 | 18.9 | 16.3 | 18.8 | 21.8 | 24.6 | 28.1 | 34.9 | 33.6 | 30.7 | 34.4 | 27.8 | 27.3 | 28.0 | 27.6 | 26.9 | 28.6 | 24.7 | 25.2 | 22.0 | 21.1 | 19.9 | 20.3 | 25 |
| 11-Jun | 23.9 | 22.6 | 25.4 | 22.0 | 19.1 | 21.4 | 20.9 | 22.2 | 23.6 | 27.8 | 33.1 | 36.0 | 33.8 | 22.0 | 40.5 | 50.2 | 45.6 | 27.6 | 16.6 | 12.1 | 13.4 | 17.1 | 18.5 | 18.3 | 26 |
| 12-Jun | 13.2 | 8.1 | 18.2 | 14.3 | 17.4 | 14.5 | 18.7 | 21.4 | 27.5 | 26.0 | 26.9 | 32.7 | 35.1 | 29.9 | 27.6 | 28.7 | 28.3 | 23.5 | 14.3 | 11.3 | 4.9 | 3.0 | 6.6 | 4.2 | 19 |
| 13-Jun | 6.9 | 6.2 | 4.7 | 8.2 | 6.7 | 15.8 | 16.1 | 35.8 | 50.1 | 43.0 | 46.3 | 37.1 | 40.3 | 45.9 | 39.4 | 44.0 | 36.9 | 32.0 | 29.2 | 10.8 | 6.0 | 19.5 | 4.6 | 13.7 | 25 |
| 14-Jun | 5.3 | 3.2 | 10.9 | 2.9 | 11.0 | 13.9 | 12.4 | 14.3 | 27.5 | 29.5 | 39.2 | 42.4 | 37.7 | 36.9 | 37.7 | 38.9 | 32.0 | 27.8 | 23.9 | 14.0 | 16.2 | 15.6 | 8.1 | 9.2 | 21 |
| 15-Jun | 13.8 | 3.2 | 4.4 | 0.7 | 3.1 | 3.2 | 11.2 | 28.0 | 27.9 | 31.5 | 28.2 | 37.4 | 32.4 | 34.7 | 30.9 | 24.9 | 25.4 | 24.8 | 19.5 | 15.5 | 16.8 | 18.4 | 10.7 | 13.5 | 19 |
| 16-Jun | 7.4 | 18.8 | 21.4 | 18.6 | 19.5 | 21.8 | 21.2 | 23.2 | 24.7 | 28.6 | 30.5 | 32.4 | 29.1 | 28.1 | 25.5 | 26.3 | 23.4 | 23.5 | 22.2 | 19.9 | 18.2 | 18.9 | 29.7 | 41.4 | 24 |
| 17-Jun | 24.1 | 24.9 | 22.2 | 20.7 | 20.4 | 22.2 | 22.1 | 26.3 | 33.7 | 34.3 | 42.3 | 47.1 | 38.0 | 29.3 | 29.9 | 22.7 | 23.8 | 23.1 | 20.1 | 18.4 | 18.1 | 21.0 | 20.1 | 20.3 | 26 |
| 18-Jun | 20.4 | 21.2 | 22.2 | 19.8 | 19.8 | 20.9 | 24.0 | 24.2 | 23.0 | 26.8 | 24.9 | 27.3 | 24.8 | 23.4 | 23.6 | 24.5 | 24.7 | 22.9 | 21.0 | 21.0 | 20.5 | 19.4 | 19.4 | 20.8 | 23 |
| 19-Jun | 19.5 | 20.8 | 20.8 | 19.0 | 18.9 | 20.4 | 23.5 | 24.2 | 22.8 | 25.5 | 25.4 | 25.9 | 26.2 | 25.6 | 25.9 | 24.4 | 24.2 | 24.5 | 20.7 | 20.5 | 19.8 | 16.6 | 16.6 | 18.3 | 22 |
| 20-Jun | 20.3 | 18.0 | 20.1 | 18.3 | 22.7 | 21.2 | 21.6 | 23.5 | 25.4 | 23.7 | 24.9 | 25.8 | 25.1 | 24.0 | 29.1 | 26.8 | 23.3 | 22.2 | 20.5 | 18.9 | 16.5 | 18.1 | 18.4 | 19.2 | 22 |
| 21-Jun | 19.4 | 16.5 | 16.0 | 14.3 | 12.8 | 11.1 | 26.4 | 25.8 | 28.2 | 23.0 | 45.6 | 44.4 | 27.5 | 23.2 | 27.3 | 27.6 | 28.1 | 22.1 | 21.8 | 18.8 | 19.7 | 7.5 | 9.6 | 3.7 | 22 |
| 22-Jun | 4.2 | 6.9 | 8.2 | 8.8 | 23.5 | 3.8 | 23.4 | 30.8 | 30.3 | 31.2 | 53.4 | 49.5 | 40.7 | 39.9 | 48.2 | 36.2 | 33.7 | 26.6 | 28.8 | 17.6 | 13.1 | 0.9 | 1.7 | 1.8 | 23 |
| 23-Jun | 2.2 | 4.5 | 7.4 | 3.9 | 1.9 | 9.0 | 12.8 | 33.3 | 28.3 | 38.9 | 55.0 | 59.4 | 45.1 | 49.2 | 37.9 | 38.5 | 31.4 | 29.1 | 30.4 | 21.4 | 23.2 | 4.5 | 1.5 | 0.8 | 24 |
| 24-Jun | 25.5 | 0.6 | 4.3 | 4.9 | 8.6 | 8.4 | 22.8 | 6.0 | 47.7 | 60.0 | 62.0 | 41.6 | 45.9 | 60.3 | 49.3 | 61.3 | 53.8 | 28.5 | 27.8 | 22.0 | 14.6 | 20.5 | 21.1 | 12.7 | 28 |
| 25-Jun | 15.6 | 10.6 | 22.7 | 8.1 | 11.9 | 17.9 | 14.8 | 31.2 | 23.7 | 24.9 | 26.8 | 32.4 | 29.1 | 30.2 | 29.8 | 28.5 | 29.9 | 22.9 | 25.4 | 23.0 | 24.8 | 30.9 | 23.3 | 12.5 | 23 |
| 26-Jun | 2.1 | 16.1 | 1.9 | 11.4 | 3.7 | 3.3 | 14.9 | 35.6 | 33.2 | 33.8 | 46.0 | 40.2 | 45.6 | 36.6 | 37.8 | 31.0 | 40.5 | 30.6 | 28.0 | 11.1 | 0.7 | 3.4 | 4.2 | 2.7 | 21 |
| 27-Jun | 1.2 | 3.7 | 1.4 | 2.3 | 9.0 | 4.2 | 17.4 | 26.8 | 29.1 | 38.3 | 43.2 | 44.7 | 48.4 | 68.2 | 51.4 | 49.5 | 33.0 | 25.3 | 18.5 | 17.0 | 17.2 | 22.8 | 19.0 | 15.2 | 25 |
| 28-Jun | 15.1 | 15.3 | 11.4 | 13.4 | 11.1 | 13.8 | 24.6 | 44.4 | 43.6 | 55.3 | 42.9 | 40.3 | 51.3 | 43.6 | 49.3 | 50.9 | 43.4 | 42.8 | 31.0 | 10.9 | 12.3 | 11.9 | 16.3 | 17.7 | 30 |
| 29-Jun | 19.8 | 21.4 | 23.3 | 25.9 | 18.4 | 23.5 | 23.2 | 39.7 | 51.3 | 50.3 | 56.8 | 60.3 | 55.8 | 80.5 | 58.4 | 41.2 | 32.1 | 28.0 | 21.4 | 12.7 | 15.2 | 23.6 | 27.7 | 9.1 | 33 |
| 30-Jun | 18.5 | 12.0 | 8.1 | 17.2 | 20.7 | 19.5 | 30.7 | 50.3 | 53.3 | 49.4 | 43.9 | 53.1 | 47.0 | 43.4 | 37.6 | 45.4 | 29.8 | 25.7 | 17.4 | 8.2 | 9.2 | 21.3 | 25.3 | 20.4 | 29 |

| | | |
|------|-----------------------|--------|
| BARR | Total Hours in Month | 720 |
| | Valid Hours | 720 |
| | Percent Data Captured | 100.0% |

Meteorological Report
The Doe Run Company
Temperature

Site Name: Rivermines

Average Interval: 01 Hour

Units: Deg. C

Sampling Frequency: 01 Second

| Sum of Tem | Hour | 24 Hour | | | | | | | | | | | | | | | | | | | | | | | | Max | Avg |
|------------|------|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | |
| 1-Jun | 11 | 11 | 11 | 11 | 11 | 10 | 11 | 13 | 14 | 14 | 16 | 17 | 18 | 19 | 19 | 19 | 19 | 18 | 17 | 14 | 12 | 11 | 9 | 8 | 19.2 | 14.1 | |
| 2-Jun | 9 | 8 | 8 | 7 | 7 | 8 | 10 | 12 | 15 | 18 | 20 | 22 | 24 | 25 | 26 | 26 | 28 | 25 | 24 | 19 | 17 | 15 | 14 | 14 | 26.4 | 16.7 | |
| 3-Jun | 14 | 13 | 13 | 12 | 11 | 13 | 18 | 22 | 26 | 28 | 29 | 29 | 30 | 30 | 28 | 27 | 28 | 24 | 23 | 21 | 21 | 20 | 20 | 18 | 30.1 | 21.5 | |
| 4-Jun | 17 | 16 | 16 | 15 | 15 | 16 | 19 | 22 | 26 | 29 | 30 | 32 | 33 | 34 | 34 | 34 | 33 | 31 | 28 | 24 | 23 | 21 | 21 | 20 | 34.4 | 24.5 | |
| 5-Jun | 19 | 18 | 17 | 15 | 14 | 15 | 18 | 20 | 22 | 24 | 25 | 26 | 26 | 27 | 27 | 27 | 27 | 26 | 25 | 23 | 21 | 17 | 15 | 14 | 27.4 | 21.3 | |
| 6-Jun | 13 | 12 | 12 | 11 | 11 | 12 | 16 | 19 | 21 | 22 | 23 | 24 | 25 | 25 | 25 | 25 | 25 | 24 | 23 | 20 | 17 | 15 | 13 | 12 | 25.4 | 18.6 | |
| 7-Jun | 11 | 10 | 10 | 9 | 9 | 10 | 14 | 19 | 22 | 24 | 24 | 25 | 26 | 26 | 27 | 27 | 27 | 27 | 25 | 22 | 18 | 16 | 14 | 13 | 27.2 | 19.0 | |
| 8-Jun | 12 | 12 | 12 | 11 | 11 | 12 | 15 | 20 | 24 | 26 | 27 | 27 | 28 | 29 | 30 | 30 | 30 | 29 | 27 | 25 | 23 | 21 | 20 | 18 | 30.1 | 21.6 | |
| 9-Jun | 16 | 14 | 13 | 13 | 13 | 14 | 19 | 23 | 25 | 28 | 30 | 30 | 31 | 32 | 31 | 28 | 30 | 29 | 28 | 27 | 24 | 22 | 22 | 22 | 31.8 | 23.4 | |
| 10-Jun | 21 | 21 | 21 | 20 | 20 | 20 | 22 | 23 | 25 | 27 | 27 | 28 | 28 | 28 | 28 | 28 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 22 | 28.5 | 24.3 | |
| 11-Jun | 21 | 21 | 21 | 21 | 21 | 22 | 24 | 26 | 28 | 29 | 29 | 22 | 20 | 21 | 20 | 20 | 21 | 22 | 23 | 22 | 20 | 19 | 18 | 18 | 28.6 | 21.5 | |
| 12-Jun | 17 | 17 | 16 | 16 | 16 | 17 | 20 | 22 | 24 | 25 | 26 | 26 | 27 | 27 | 28 | 28 | 28 | 28 | 27 | 25 | 22 | 17 | 16 | 14 | 13 | 28.2 | 21.5 |
| 13-Jun | 12 | 11 | 10 | 10 | 9 | 10 | 15 | 19 | 22 | 24 | 24 | 25 | 27 | 27 | 27 | 28 | 28 | 28 | 27 | 26 | 23 | 19 | 16 | 15 | 14 | 28.1 | 18.7 |
| 14-Jun | 14 | 13 | 12 | 11 | 11 | 12 | 16 | 20 | 25 | 27 | 29 | 29 | 30 | 31 | 31 | 31 | 31 | 30 | 29 | 26 | 24 | 22 | 20 | 18 | 31.5 | 22.5 | |
| 15-Jun | 17 | 16 | 15 | 14 | 14 | 15 | 19 | 23 | 25 | 28 | 30 | 31 | 32 | 33 | 33 | 32 | 32 | 32 | 30 | 28 | 26 | 25 | 22 | 22 | 32.9 | 24.7 | |
| 16-Jun | 20 | 20 | 22 | 21 | 23 | 25 | 26 | 28 | 30 | 32 | 33 | 33 | 33 | 34 | 34 | 34 | 33 | 32 | 31 | 29 | 28 | 27 | 27 | 23 | 34.3 | 28.3 | |
| 17-Jun | 21 | 20 | 19 | 19 | 19 | 20 | 21 | 23 | 25 | 27 | 29 | 30 | 31 | 31 | 32 | 31 | 31 | 32 | 31 | 30 | 28 | 27 | 26 | 26 | 25 | 32.2 | 25.9 |
| 18-Jun | 25 | 24 | 24 | 23 | 23 | 24 | 25 | 27 | 29 | 30 | 31 | 32 | 32 | 32 | 33 | 32 | 32 | 32 | 31 | 30 | 28 | 27 | 27 | 26 | 26 | 32.8 | 28.0 |
| 19-Jun | 25 | 25 | 24 | 24 | 23 | 23 | 26 | 27 | 29 | 29 | 31 | 31 | 31 | 31 | 32 | 32 | 32 | 32 | 31 | 29 | 28 | 27 | 25 | 24 | 24 | 32.4 | 27.7 |
| 20-Jun | 23 | 22 | 22 | 21 | 22 | 23 | 26 | 28 | 30 | 31 | 31 | 32 | 33 | 34 | 34 | 34 | 33 | 32 | 31 | 29 | 27 | 25 | 26 | 25 | 33.6 | 27.9 | |
| 21-Jun | 23 | 21 | 20 | 19 | 19 | 21 | 25 | 27 | 29 | 30 | 31 | 31 | 29 | 29 | 29 | 29 | 29 | 28 | 27 | 25 | 23 | 22 | 22 | 22 | 30.9 | 25.7 | |
| 22-Jun | 21 | 19 | 18 | 17 | 16 | 18 | 22 | 24 | 26 | 28 | 28 | 29 | 30 | 31 | 31 | 31 | 31 | 30 | 28 | 26 | 23 | 20 | 18 | 17 | 31.4 | 24.3 | |
| 23-Jun | 16 | 15 | 15 | 14 | 14 | 15 | 18 | 24 | 27 | 28 | 30 | 31 | 32 | 33 | 33 | 33 | 32 | 31 | 28 | 26 | 22 | 21 | 20 | 20 | 32.9 | 24.4 | |
| 24-Jun | 19 | 18 | 17 | 16 | 16 | 17 | 20 | 26 | 31 | 33 | 34 | 35 | 36 | 36 | 37 | 37 | 37 | 36 | 35 | 32 | 30 | 29 | 28 | 28 | 37.1 | 28.3 | |
| 25-Jun | 24 | 22 | 22 | 21 | 21 | 23 | 26 | 29 | 31 | 32 | 33 | 33 | 34 | 34 | 34 | 33 | 33 | 31 | 30 | 28 | 26 | 25 | 23 | 21 | 34.0 | 27.8 | |
| 26-Jun | 18 | 16 | 15 | 13 | 12 | 13 | 18 | 22 | 24 | 25 | 27 | 28 | 29 | 30 | 30 | 31 | 31 | 30 | 29 | 26 | 21 | 18 | 17 | 15 | 30.9 | 22.3 | |
| 27-Jun | 14 | 14 | 13 | 12 | 11 | 13 | 19 | 24 | 26 | 28 | 32 | 34 | 36 | 37 | 38 | 38 | 38 | 37 | 35 | 31 | 29 | 29 | 26 | 24 | 38.3 | 26.6 | |
| 28-Jun | 24 | 22 | 21 | 21 | 19 | 20 | 26 | 31 | 35 | 37 | 39 | 40 | 41 | 42 | 43 | 43 | 41 | 41 | 38 | 32 | 28 | 25 | 24 | 24 | 43.1 | 31.6 | |
| 29-Jun | 24 | 22 | 22 | 21 | 21 | 21 | 25 | 31 | 35 | 37 | 38 | 39 | 39 | 41 | 41 | 42 | 41 | 40 | 38 | 34 | 32 | 31 | 29 | 27 | 41.9 | 32.0 | |
| 30-Jun | 25 | 24 | 23 | 22 | 22 | 23 | 27 | 31 | 35 | 36 | 37 | 39 | 39 | 40 | 41 | 41 | 40 | 39 | 36 | 33 | 31 | 31 | 29 | 31 | 41.1 | 32.3 | |



| | |
|-------------------------------|--------|
| Maximum Hour//Monthly Average | 43.1 |
| Total Hours In Month | 720 |
| Valid Hours | 720 |
| Percent Data Captured | 100.0% |

Meteorological Report
The Doe Run Company
Site Pressure

Average Interval: 01 Hour

Units: mmHg

Sampling Frequency: 01 Second

Site Name: Rivermines

| Sum of Pres | Hour | | | | | | | | | | | | | | | | | | | | | | | | 24 Hour | | | | | | | | |
|-------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|
| | ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Max | Avg | | | | | | |
| 1-Jun | 741 | 741 | 741 | 741 | 742 | 743 | 743 | 743 | 743 | 743 | 744 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 744 | 743 | | | | | | | |
| 2-Jun | 743 | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 743 | 743 | 742 | 742 | 741 | 741 | 740 | 740 | 740 | 740 | 741 | 741 | 741 | 742 | 742 | 744 | 742 | | | | | | | |
| 3-Jun | 742 | 742 | 742 | 742 | 742 | 743 | 742 | 742 | 743 | 742 | 741 | 740 | 740 | 739 | 739 | 738 | 738 | 738 | 738 | 739 | 739 | 740 | 741 | 741 | 741 | 743 | 741 | | | | | | |
| 4-Jun | 741 | 740 | 740 | 740 | 741 | 741 | 741 | 741 | 740 | 740 | 740 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 740 | | | | | | |
| 5-Jun | 741 | 741 | 741 | 741 | 742 | 742 | 742 | 742 | 743 | 743 | 743 | 742 | 742 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 742 | 743 | 743 | 743 | 743 | 743 | 742 | | | | | | |
| 6-Jun | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 745 | 745 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 746 | 746 | 746 | 746 | 744 | 744 | | | | | |
| 7-Jun | 746 | 746 | 746 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 746 | 746 | 745 | 745 | 745 | 745 | 745 | 745 | 746 | 746 | 746 | 746 | 747 | 746 | 748 | | | | | |
| 8-Jun | 746 | 746 | 746 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 746 | 746 | 745 | 744 | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 747 | 745 | 745 | | | | | |
| 9-Jun | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 744 | 743 | 743 | 742 | 742 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 742 | 742 | 742 | 742 | 744 | 742 | 742 | | | | | |
| 10-Jun | 742 | 741 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 741 | 741 | 741 | 741 | 741 | 741 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | | | | |
| 11-Jun | 741 | 741 | 741 | 741 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 743 | 744 | 743 | 743 | 741 | 742 | 742 | 743 | 742 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 742 | 742 | | | | |
| 12-Jun | 744 | 744 | 745 | 745 | 745 | 746 | 746 | 746 | 747 | 747 | 747 | 747 | 747 | 748 | 746 | 746 | 746 | 745 | 746 | 746 | 747 | 747 | 747 | 747 | 747 | 747 | 747 | 746 | 746 | | | | |
| 13-Jun | 747 | 747 | 747 | 747 | 747 | 748 | 748 | 748 | 747 | 747 | 747 | 747 | 747 | 747 | 746 | 746 | 746 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 748 | 746 | | | | |
| 14-Jun | 745 | 745 | 745 | 745 | 745 | 745 | 746 | 746 | 746 | 746 | 746 | 746 | 746 | 745 | 745 | 745 | 745 | 745 | 745 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 744 | 744 | 745 | 745 | | | |
| 15-Jun | 744 | 745 | 745 | 745 | 745 | 745 | 746 | 745 | 746 | 745 | 745 | 745 | 745 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 745 | 745 | 746 | 745 | 745 | | | |
| 16-Jun | 745 | 745 | 745 | 745 | 745 | 746 | 746 | 746 | 747 | 747 | 747 | 747 | 747 | 746 | 746 | 745 | 744 | 743 | 743 | 743 | 743 | 744 | 744 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | | |
| 17-Jun | 745 | 745 | 745 | 744 | 744 | 744 | 744 | 745 | 745 | 744 | 744 | 743 | 743 | 743 | 742 | 742 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 745 | 743 | 743 | | | |
| 18-Jun | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 740 | 741 | 741 | 741 | 741 | 742 | 742 | 742 | 743 | 743 | 741 | 741 | 741 | | | |
| 19-Jun | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 744 | 744 | 744 | 744 | 743 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 744 | 744 | 744 | 744 | 744 | | |
| 20-Jun | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 746 | 746 | 746 | 746 | 746 | 746 | 745 | 745 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 746 | 745 | 745 | 745 | | |
| 21-Jun | 745 | 745 | 745 | 744 | 745 | 745 | 745 | 745 | 745 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 743 | 743 | 744 | 744 | 744 | 745 | 745 | 745 | 745 | 745 | 744 | 744 | | | |
| 22-Jun | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 746 | 745 | 745 | 745 | 745 | 744 | 744 | 743 | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 744 | 745 | 744 | 744 | 745 | 744 | | |
| 23-Jun | 744 | 744 | 744 | 744 | 744 | 744 | 745 | 745 | 745 | 745 | 745 | 745 | 745 | 744 | 744 | 743 | 743 | 742 | 742 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 745 | 744 | 744 | 744 | 744 | | |
| 24-Jun | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 742 | 742 | 742 | 742 | 742 | 743 | 743 | 743 | 743 | 743 | |
| 25-Jun | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 741 | 741 | 741 | 741 | 741 | 741 | 742 | 742 | 743 | 743 | 743 | 743 | 742 | 742 | 742 | 742 | 742 | |
| 26-Jun | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 744 | 743 | 743 | 743 | 743 | 743 | 742 | 742 | 742 | 742 | 742 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 |
| 27-Jun | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 744 | 744 | 744 | 744 | 744 | 743 | 743 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 743 | 743 | 743 | 742 | 742 | 742 | 742 | 742 | 743 |
| 28-Jun | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 744 | 743 | 743 | 743 | 743 | 743 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 742 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 |
| 29-Jun | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 743 | 744 | 743 | 743 | 742 | 742 | 741 | 741 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 740 |
| 30-Jun | 740 | 740 | 741 | 741 | 741 | 742 | 742 | 742 | 742 | 742 | 741 | 741 | 741 | 741 | 740 | 740 | 740 | 740 | 740 | 740 | 740 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | 741 | |



| | |
|------------------------------------|--------|
| Maximum Hour//Monthly Average | 748 |
| Total Hours in Month | 720 |
| Valid Hours//Percent Data Captured | 720 |
| | 100.0% |

